THE TENDER FRUIT INDUSTRY IN CANADA

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FOREWORD

This study of Canada's Tender Fruit Industry was initiated by the Canada Department of Agriculture on request from producers and processors in British Columbia and Ontario. The study was carried out by the department's Economics Branch and assisted throughout by a committee appointed from the tender fruit industry. Members of this committee participated throughout the study by providing information about the industry and commenting on various draft sections.

The report provides statistical data on Canada's tender fruit industry as well as information on the problems confronting the industry. Sources of published specific data are noted in the report. General information was obtained through personal industry interviews.

Special recognition is given here to the assistance received from the industry and provincial governments. All members of the industry, especially those members of the Industry-Government committee working on this project, gave freely of their time and energy. The assistance and information made available by the industry, and provincial governments involved was invaluable to the conduct of the study.

Dr. Robert W. Anderson of the Research Division, as project leader, was responsible for conducting the study. Mr. Thomas A. Bennett of the Marketing and Trade Division assisted in writing the publication. Throughout the study, assistance and advice was provided by numerous other individuals within the Economics Branch. Particular appreciation is due to Mr. Bruce Phillips who worked on the project for the Economics Branch in the Summer of 1972.

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THE TENDER FRUIT INDUSTRY IN CANADA

INTRODUCTION

On request from producers and processors in British Columbia and Ontario, the Economics Branch of Agriculture Canada initiated a study of the tender fruit industry in Canada. The overall objective of the study is to assess the importance of the canning segment of the industry in maximizing producer income and to determine its potential.

This study focuses on five of Canada's fruit crops. Often referred to collectively as tender tree fruit or tender fruit crops, they include peaches, pears, apricots, sweet cherries and prune/plums. All have several characteristics in common. Each fruit is retailed in the fresh form and in the processed form, usually canned in sugar syrup. Each fruit has a very short storage period in the fresh state, with the exception of pears, and consequently, the fresh market period for each fruit is quite short in length.

Ontario and British Columbia are the major producing provinces. Within the two provinces, the principal areas of concentration of production are the Niagara region of Ontario and the Okanagan Valley of British Columbia.

Total cash receipts from tender fruit have increased marginally even though there has been a general decline in production. The increase in cash receipts has largely been the result of an increase in fresh market prices. In response, a larger percentage of the crop was sold on the fresh market and a declining percentage was directed to the processing market. This trend is one factor which has brought about a general decline in the canning sector. It is this state of decline in the processing sector that prompted the request for this study.

The scope of the study encompasses the production, processing, and marketing activities associated with the tender fruit industry. Major emphasis is placed on peaches as the dominant tender fruit crop.

The procedure used in the study included personal interviews with prominent industry participants in both Canada and the United States, surveys of segments of the Canadian industry and extensive use of secondary data. An Industry-Government committee consisting of producers, processors, Provincial Government and Federal Government representatives, was utilized to assist in reviewing all of the available data and to suggest specific areas for study. In addition, an interdepartmental steering committee, consisting of two members from the Canada Department of Agriculture and one member from the Department of Industry, Trade and Commerce, was established to co-ordinate the work and receive the report of the study.

PEACHES

Peaches account for nearly half of the receipts from all tender fruit crops. In terms of absolute dollars, receipts from peaches reached a high of $9.8 million in 1970. This is almost double the receipts for pears. As a percentage of total tender fruit receipts, peaches have declined from an average of 57.4 percent in the 1951-55 period to 46.5 percent in the 1966-71 period (Table 1).

PRODUCTION

Since 1946, peach production in Canada has fluctuated from a low of 61 million pounds in 1950 to a high of nearly 154 million pounds in 1961. Ontario has accounted for approximately 81 percent of the annual Canadian peach production since 1950 with British Columbia producing the remaining portion.

Canadian peach production exceeded 112 million pounds annually during the period 1952-64 with the exception of 1956 (Table 2 and Figure 1). From 1965 to 1969, Canadian production was generally below 105 million pounds. In 1970, peach production totalled nearly 110 million pounds and rose to 128 million pounds in 1971. Unfavourable climatic conditions in southwestern Ontario greatly reduced the 1972 crop, which is estimated to be about 105 million pounds.

Freestone peaches have been, and will likely continue to be, the major type of peach grown in Canada. Freestone peaches differ considerably from Clingstone peaches. Freestone peaches are soft, juicy, and particularly good for the fresh market while Clingstone peaches are firm and retain their shape especially well in processing. In

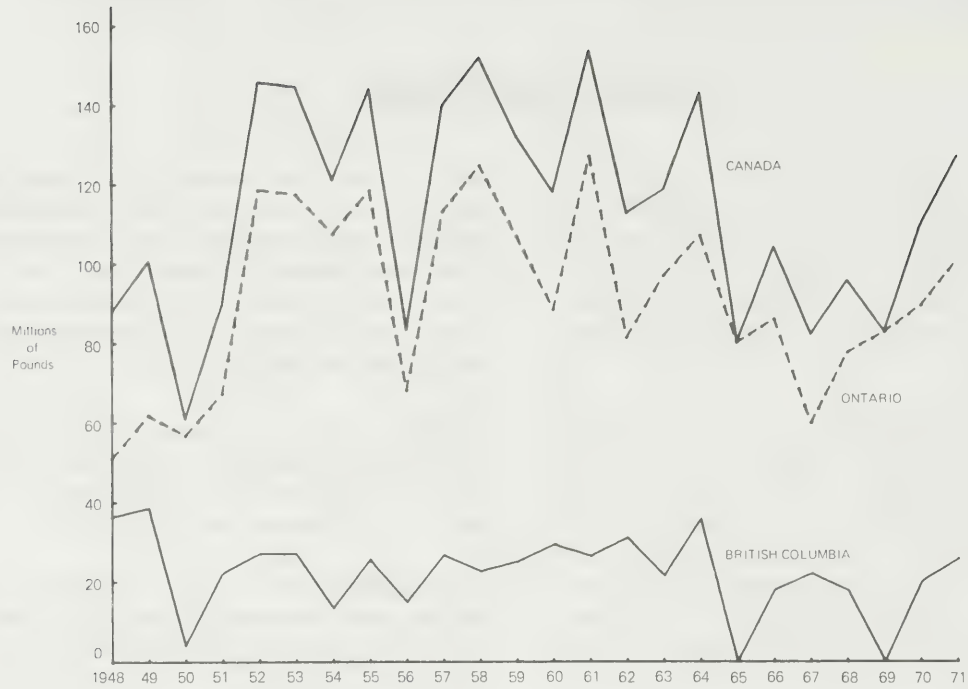

FIGURE 1. PEACH PRODUCTION CANADA, ONTARIO AND BRITISH COLUMBIA.

the U.S., Clingstones are the predominant type used for processing. With less than five percent of Canada's peach production consisting of Clingstone varieties, Freestone peaches are utilized for both the fresh market and for processing.

Ontario

In 1960, 24 percent of Ontario's total orchard acreage consisted of peaches. Of this, over 99 percent was centered in two areas, the Niagara Fruit Belt and southwestern Ontario. These two areas have adequate soil conditions, winters that do not usually inflict low temperature injury, and relatively frost-free seasons. Peaches account for 42 and 57 percent respectively, of orchard plantings in these two areas.[1] In terms of total production, Ontario averaged about 85 million pounds annually for the decade 1962-71, down about 25 million pounds from the previous 10 year average (Table 3 and Figure 1). Measured in acres, production declined from a high of 16,455 acres in 1956 to 10,169 acres in 1971 (Table 4).

Although the productive life of a peach tree is about 18 to 20 years, the varieties planted are constantly changing to meet grower and consumer demands for better quality, higher yields, and a longer harvest season. In the early 50's growers planted dual purpose varieties such as Golden Jubilee and Veteran (Tables 5 and 6). By the early 60's, growers had shifted to other varieties, such as Earlired, Loring, Royalvee and Garnet Beauty, better suited to the fresh market. In the late sixties, a significant acreage of Clingstone peaches was planted. The predominant Clingstone varieties were Babygold 5 and 7.

The extent of new plantings indicate that production in Southwestern Ontario is expanding while it is declining in the Niagara region. Peach trees require at least four years of growth before they are considered of bearing age. With approximately 35.84 percent of their trees non-bearing (under four years of age), southwestern Ontario is currently in a state of expansion. In comparison, only 28.48 percent of the trees in the Niagara area are non-bearing. In view of this planting trend, southwestern Ontario has perhaps the greatest production potential and will undoubtedly become more influential in the future.

[1] Krueger, R.R., The Geography of the Orchard Industry in Canada, opposite p. 29.

British Columbia

A much smaller percentage (9 percent or 2,711 acres in 1968)[2] of British Columbia's total orchard acreage consists of peaches. Of this acreage, approximately 98 percent is located in the Okanagan Valley, running from the Canada/U.S.A. border in the south to Salmon Arm in the north. The Summerland area is considered to be the major area and, although encountering complete crop losses in 1965 and 1969, the most consistent production area.

The situation facing British Columbia peach producers differs considerably from that in Ontario. Orchard land is limited in British Columbia and consequently prices for land are at least as high as in the Niagara area. Severe winters frequently result in tree damage as was true during the winters of 1964-65 and 1968-69. Also, because of the dry climate, irrigation is necessary.

During the late 40's production averaged over 35 million pounds annually, fluctuated considerably in the 50's and early 60's and since 1965 has averaged from "nil" to 25 million pounds (Figure 1). With the new plantings now in the ground the potential is there for production to increase to earlier levels, in the 30 million pound range. Estimates indicate that the total bearing acreage will increase from 1,656 acres in 1970 to 2,048 acres in 1975 (Table 7). As in Ontario, Freestone peaches dominate. Only 142 acres of Clingstone peaches were reported in 1968[2]. Fresh market varieties include Redhaven, Dixie Red and Sunhaven while Golden Jubilee, Valiant and Veteran, along with the Clings, are used for canning.

COST OF PRODUCTION

Grower returns depend upon a number of factors including their individual costs and production levels. Prices received by growers are dependent upon overall production within the country and on U.S. production. Although data on average prices received by growers and total production values are available, current cost data is difficult to obtain. British Columbia has published average production costs for Freestone peaches for 1971, and Ontario has developed and is in the process of publishing, cost data.

The Ontario study indicates that the total cost to produce, harvest and prepare the yield from one acre of Freestone peaches for the fresh market based on an average of five tons per acre, is approximately $1,166.70 (Table 8). In British Columbia, cost data, based on a yield of eight tons per acre, would indicate a per acre cost of $1,354.81 (Table 9). The cost data from Ontario are estimates arrived at in a joint meeting by nine peach growers from the Niagara Peninsula. Utilizing this same methodology to arrive at comparable costs in Ontario to produce and market for processing, a cost of $842.10 was developed. Container costs account for much of the difference between the cost for the fresh market and the cost for the processing market.

Although cost data for Freestone peaches are not available for each region, data are available from several production areas for varying years during the last five-year period. Recognizing that the data from each area are for a different year, it is possible to compare per ton costs only in a general way. Comparing this data, it would appear that the total cost per ton in Ontario increased from $129.10 in 1967 to $168.42 in 1972 (Tables 8 and 10). Harvesting costs increased from $34.49 per ton to $42.90, while cultural costs increased from $48.79 to $79.52 per ton. A general comparison of costs in British Columbia (1972), Michigan (1969) and Ontario (1972) indicates that cultural costs in Ontario were highest at $79.52 per ton compared to $59.83 in British Columbia and $54.20 in Michigan (Tables 8, 9, 10 and 11). Harvest costs, at $42.90 per ton in Ontario and $22.31 in British Columbia, were greater for both provinces than for Michigan where costs were $17.60 per ton. However, the data for Michigan are for 1969 and more current costs are likely to be similar to 1971 costs in B.C. It can be inferred that total costs in both Ontario and British Columbia are generally higher than Michigan although general climatic conditions in Michigan are similar to those in Ontario. Each of these areas must compete with total per ton production costs in California that range from $54.77 to $71.89 per ton (Table 12).

Several industry sources state that per case recovery from Clingstone peaches is greater than from Freestone peaches and therefore, Clingstone peaches are less expensive to process. Although California has published processing cost data for Clingstones, other peach processing areas have not. As neither B.C. nor Ontario can match California's Clingstone yields, costs in Canada are assumed to be higher. Comparing Clingstone to Freestone peaches, overall production costs for Clingstone peaches are expected to be lower due to higher yields and lower harvest cost. In California, Clingstone peach production exceeds 15 tons per acre (Table 12). Although very few Clingstone peaches are grown in Ontario and British Columbia, their yield per acre is reported to be very similar to that of Freestone peaches which is five and eight tons per acre in Ontario

[2] B.C. Tree Fruits Limited, Kelowna, B.C. Forecast September 1968.

FIGURE 2. YEARLY AVERAGE PRICE RECEIVED BY GROWERS FOR PEACHES. 1946-1971.

and British Columbia respectively. Clingstones are firm peaches, less susceptible to bruising, and for this reason they may be harvested mechanically. Producers in Ontario have experimented with mechanical harvesting and indications are that it is satisfactory. Mechanical harvesting will, undoubtedly, be adopted by those producers growing Clingstone peaches.

Formal data on the cost of canning peaches in Canada are not available. However, surveying those firms now canning peaches a cost range was developed which closely parallels similar cost data developed in Ontario[3] (Table 13). Higher costs are indicated for a 24 x 14 oz. case of peaches in Canada than for the same case of either Freestone or Clingstone peaches in California.

VALUE OF PRODUCTION

The average return per ton (price) received by Canadian peach growers fluctuated between $71 and $105 per ton in the early 1960's (Table 2 and Figure 2). Since 1962, the price has moved upward steadily, reaching a high of $216 per ton in 1969.

The most significant price increases occurred in the fresh market. As a result of the higher prices and returns on the fresh market, the portion of the crop received by processors in Ontario fell from about 50 percent to approximately 30 percent.

Accurate prices and returns to growers are difficult to obtain in view of the different markets and marketing mechanisms. Sales for processing are through one channel only but fresh market sales, as outlined in a later section on the marketing structure of tender fruit, include sales through roadside stands, private sales to retailers, sales through Fresh Fruit Marketing Boards or Agencies and sales through other cooperative groups. Prices received at each level of the fresh marketing channel vary considerably. Some of the variation is a result of functions performed by the various principals involved. Growers marketing through roadside stands sell directly to consumers and in so doing provide packaging, storage, absorb additional spoilage and loss and absorb the costs of operating and maintaining a retail outlet. Consequently, the price received from roadside sales represents returns not only to production but to other marketing functions as well. Producer returns from sales through marketing organizations represent returns to a varying assortment of functions, and in many cases to production only.

[3] Chudleigh, E.P., "Alternatives For the Ontario Tender Fruit Industry". Published by the Ontario Food Council, September 1972, p. 29.

In Ontario, growers selling to the processing market have, since 1962, received prices ranging from $104.00 to $144.00 per ton (Table 14). This compares with a price range of California Clingstone peaches for the same period of $57.20 to $82.20 per ton (Table 15). Ontario growers selling peaches on the fresh market have received prices estimated to range from $216 to $277 per ton during the period 1966-70[4]. Prices to growers in British Columbia have generally averaged lower than to growers in Ontario with differences of over $30 per ton noted (Table 3). On a percentage basis, processing prices have increased approximately 33 percent while fresh prices have risen by over 100 percent since the early 1960's.

Prices received by peach growers are influenced by a number of factors. Regression analysis was used to determine the most significant factors[5]. The factors determined to be most significant include (1) total Canadian annual peach production, (2) Canadian stocks of canned peaches[6] and (3) per capita disposable income. Each factor exhibits the expected relationship and together explains over 92 percent of the variation in grower prices. Production levels in the United States, the major exporter of peaches to Canada, is significant in determining grower prices in Canada in some years but not in others. The explanation for this may be that during years of very large crops in the U.S. the potential for additional exports to Canada at reduced prices is exploited. In short crop years export prices, presumably, are more in line with Canadian prices.

In Ontario, an analysis of the processing segment of the industry indicated that over 96 percent of the variation in prices received by peach growers selling to processing companies was accounted for by Ontario peach production, Canadian canned peach stocks, Canadian disposable income and total U.S. production[7]. The analysis indicated that grower prices are determined to a large extent by Canadian conditions, with U.S. production the least significant of the key variables.

[4]The fresh price per ton was calculated by removing the value of the peaches sold for processing from the total Ontario peach value and dividing by the number of tons sold to the fresh market. Consequently, the prices given are averages representing several outlets including sales through a number of marketing organizations. The values for the years in the 1966-70 period are as follows: 1966 - $216.40; 1967 - $273.16; 1968 - $291.84; 1969 - $297.71; and 1970 - $237.97.

[5]A discussion of the regression model for Ontario peaches is found in Appendix B.

[6]Since 1959 only stocks held by canners are included.

[7]Op cit.

UTILIZATION

Most of Canada's peaches are marketed in either fresh or canned form and in the "further processed" form such as pies, baby food, preserves, and various peach desserts. Prior to the late 1960's, processors purchased over 50 percent of the total peach production for canning or other processing. As production declined in the late 1960's, processor purchases accounted for less than 40 percent of the crop, reaching a low of 25 percent in 1970 (Table 2). Although some raw product is imported for processing, the total pack declined (Table 2). Average stocks of canned peaches have also declined accordingly.

Sales of peaches on the fresh market are not well documented and data are difficult to obtain. Sales through roadside markets and pick-your-own operations are frequently not recorded or are not segregated by the commodity sold. The British Columbia Department of Agriculture has determined that over half of the total peach crop in the province is sold through roadside or retail farm markets. Rail-car unload data indicate that Toronto, Montreal, Winnipeg and Vancouver are the major markets for fresh peaches (Table 16). These major markets generally receive fresh peaches from only one Canadian producing area and from foreign sources (Table 17). Total consumption of fresh market peaches has increased only marginally, from an average of 89 million pounds in the 1951-55 period to 99 million pounds in the 1966-70 period (Table 18). During the same period, total consumption of canned peaches increased from 56 to 76 million pounds.

Even though the major peach producing areas have both fresh and processing market outlets, they differ in their dependence upon each market. In Ontario, which has a sizeable urban population, roadside markets and pick-your-own operations are open throughout the entire peach season in addition to the conventional retail outlets. In British Columbia, roadside markets are also important. However, with its smaller urban population, roadside markets are very dependent upon tourist trade and are open therefore, only until Labour Day. After this date sales are made mostly to processors. Despite the short fresh market season, B.C. producers sold less than 13 percent of their 1971 production to processors.

IMPORTS

Canned imports have increased significantly while fresh imports have increased marginally. Prior to 1960, less than 23 million pounds of canned peaches were imported into Canada (Table 2). Canned imports steadily increased reaching a high of 74.1 million pounds in

1969. Fresh imports from 1956 to 1965 averaged approximately 33 million pounds. During the period 1966-70, they averaged 36 million pounds.

Most of the canned imports are Clingstone peaches from the United States. Very few canned Freestone peaches are imported. Consequently, the imported canned Clingstone peaches compete directly with Canada's canned Freestones. In 1960, the U.S. accounted for 99 percent of Canada's total peach imports. The U.S. share of the market has declined, however, and in 1971 was 75 percent (Table 19). Australia became a significant factor in the Canadian market in the mid 1960's with imports increasing from one percent in 1960 to 26 percent of total canned peach imports in 1969. Imports from Australia then declined to 15 percent in 1971. South Africa had 10 percent of the market in 1971. The U.S. has been able to maintain their share of the Canadian market even with a two cent per pound tariff. Australia's increased exports to Canada in the mid sixties was largely the result of an aggressive promotion program by Australia and a very low priced product resulting from unusually high yields in that country. A number of adjustments have now been made in Australia to improve the profitability of their industry. This has resulted in higher export prices and therefore the loss of a large portion of the market gained in the mid 1960's.

Similar to canned imports, fresh peach imports are mainly from the U.S. There is a 10 percent ad valorem tariff on fresh imports except during Canada's peach season when a 1.5 cents per pound specific tariff can be applied for a 14 week period (Table 20).

PEARS

FIGURE 3. CANADIAN PEAR PRODUCTION. 1948-1971.

Canada's commercial pear industry ranks a distant second to peaches in importance among tender tree fruits. Annual grower revenue from pears since 1960, with one exception, has exceeded $3 million annually. A high of $5.1 million was reported in 1970. Pear production is more widespread than peach production with significant commercial operations in the provinces of British Columbia, Ontario and Nova Scotia.

PRODUCTION

Pear production in Canada has gradually increased since 1946 reaching a high of 103.1 million pounds in 1966 (Table 21 and Figure 3). Ontario and British Columbia, the two major producing provinces, account for approximately 96 percent of the total production, about equally divided between the two, and approximately 97 percent of the value of all pears produced in Canada (Table 21). Nova Scotia's production has remained relatively small in comparison to that of the other two provinces.

Although a number of pear varieties are grown across Canada, the Bartlett variety dominates in all three provinces. Of the other varieties produced, Anjou is popular in British Columbia where it accounts for 20 to 30 percent of production, Kieffer and Bosc are produced in Ontario and Clapp's Favourite is important in Nova Scotia. There are several pests and diseases that require constant control, but present management practices have prevented serious production cutbacks. Future pear production levels will depend more upon economic factors in the market rather than upon production impediments.

Ontario

Ontario pear acreage totals 5,700 acres and accounts for only 11 percent of Ontario's total orchard acreage. About 60 percent of this acreage is located in the Niagara Fruit Belt. The western Lake Ontario and southwestern Ontario regions are the other major areas of commercial production, each with about 10 percent of the total acreage. Average production in the Province during the last decade (1962-1971) has been almost 46 million pounds, about eight million pounds more than in the previous 10 year period (Table 22).

Despite the fact that total pear acreage has not changed appreciably in the last 25 years, production has continued to increase as a result of increasing yields. However, higher yields have not been the result of a shift to larger commercial units. According to the 1971 fruit tree census, 85 percent of the 1,903 farms reporting pear trees had less than five acres of pears. Very few growers rely solely on pear production as their major crop.

Bartlett and Kieffer pears account for 61 and 19 percent, respectively, of total pear trees (Table 23). Bartletts are grown primarily for the fresh market while Kieffers are grown almost exclusively for processing. There is a definite trend away from the Kieffer variety. The Kieffer variety is considered to be a poor pear, from a quality standpoint, and not especially suited for either the fresh market or for processing. The only factors favouring the Kieffer variety are higher yields and resistance to fire blight. In 1961, the average yield per acre was 2.5 tons for Bartletts and four tons for Kieffers. In view of a yield difference of this magnitude a shift away from the Kieffer variety would undoubtedly result in a decline in total pear production.

British Columbia

Ranking behind apples, pears are the second most important orchard crop in British Columbia. Although there are only two-thirds as many acres devoted to pears in British Columbia, total production is almost as great as in Ontario (Table 22). Higher yields are achieved in British Columbia, presumably as a result of moisture control through the use of irrigation.

Eleven percent of British Columbia's orchard acreage (approximately 3,850 acres bearing and non-bearing) is devoted to pear production of which more than 95 percent is located in the Okanagan Valley. As with other tender fruit crops grown in the Okanagan, the best pear orchard sites are the sloping terraces above the valleys which afford good air drainage. As pears are hardier than the other tender fruit crops, they are often planted in areas unsuitable for these crops. Consequently pears, despite their hardiness, have survival rates similar to those of other tender fruit crops.

Two varieties dominate with Bartlett accounting for 60 to 75 percent of total production and Anjou for 20 to 30 percent. Anjous, which mature in late September about five weeks after Bartletts, are sold entirely on the fresh market while only 60 to 65 percent of the Bartletts are sold fresh. A scarcity of suitable sites is believed to be the major limiting factor in long term growth in this Province.

Nova Scotia

Nova Scotia pear production, with a total farm value of approximately $100,000, is small when compared to that of Ontario and British Columbia (Table 22). Nevertheless, pears are an important crop in Nova Scotia providing many farmers with a portion of their income.

Approximately 5 percent of Nova Scotia's total orchard acreage, or about 650 acres, is devoted to pear production. The great majority of the acreage is located in the Annapolis Valley region of Kings County. Most of the pear acreage is planted to two varieties, Bartlett and Clapp Favourite.

Lack of a nearby market is perhaps the most limiting factor facing the Nova Scotia pear industry. Soil and

climatic conditions are good, the price of land is reasonable and the cost of production is in line with other regions. However, to reach the major markets high transportation costs must be incurred. This more than accounts for any production advantages that Nova Scotia may have.

COST OF PRODUCTION

A very limited amount of cost data is available. Data from British Columbia for 1972 revealed a cost of production of $114.03 per ton (Table 24). A yield of 10 tons per acre was assumed for British Columbia, considerably above that expected in Ontario. Production costs are not available for Ontario. However, costs published in 1969 for Michigan may give some indication of what to expect in Ontario. Michigan assumed an average yield of five tons per acre and arrived at a per ton cost of production of $100.87. Comparing 1969 cost of production data in Michigan and British Columbia, it would be reasonable to expect that costs for 1972 in Michigan would be similar to, if not higher than, those of British Columbia.

From this very brief look at costs, and taking into consideration the fact that production has been relatively stable, it would appear that Canada is competitive with respect to pears.

VALUE OF PRODUCTION

Returns per ton (price) received by Canadian pear growers averaged less than $100 per ton, but were very stable prior to 1966 (Tables 21 and 25). Since 1966, the price has exceeded $110.00 per ton each year reaching a high of $130.00 in 1969 and averaging approximately $114.00 per ton.

All provinces have experienced higher grower prices with an accompanying increase in supplies. Average annual production in the 1966-70 period exceeded that of any other period, yet prices increased steadily. Ontario experienced a gradual increase in both supply and prices until 1968 when supplies were below average and prices jumped by $31.00 per ton (Table 22). The overall trend in British Columbia has been one of severe supply fluctuations and significant variations in price. This is true for Nova Scotia where supplies and prices also increased. This general upward trend in prices together with increasing supplies indicate that demand is expanding and, in turn, is providing encouragement for the industry.

Three factors - Ontario peach production, Ontario pear production and disposable income - are estimated to account for 93 percent of the variation in the processing price for Ontario pears[8]. Regression analysis indicates that conditions within Ontario are the most important in explaining price variations.

UTILIZATION

As with peaches, most of Canada's pears are marketed in either fresh or canned form with a few utilized in such further processed forms as pies, baby food, preserves and various desserts. The two major market outlets, fresh and processing, share total production almost equally. It is evident that the processing segment of the pear industry represents a primary market outlet and not a secondary market outlet as was implied with peaches.

Canadian pears are sold on both the domestic and export markets. Of the two markets, the domestic market is by far the most important, accounting for approximately 93 percent of total production. British Columbia producers market more of their pears fresh than Ontario producers, shipping to every major Canadian city with the exception of Quebec City (Tables 26 and 27). Based upon rail-car unload statistics, Ontario has not developed its fresh pear market to the same extent as has British Columbia. Despite their favourable location, Ontario has not been able to dominate such major city markets as Montreal and Toronto.

The general increase in the production of pears has been accompanied by a general increase in the annual pack of canned pears. Based on a five-year average comparison, the canned pear pack increased from an average of 21 million pounds in the 1946-50 period to a high of approximately 32 million pounds in the 1961-67 period (Table 21). The average pack during the 1966-70 period, while declining slightly, has averaged approximately 31 million pounds. Therefore, it would appear that the canning segment is remaining rather stable.

Annual stocks of canned pears have trended upward averaging approximately 22 percent of the domestic pack during the 1946-50 period and approximately 41 percent during the 1966-70 period. The processed pack roughly approximates 2.5 times the volume of stocks on hand in normal years.

Fresh pear consumption is on the increase while canned pear consumption remains relatively constant or increasing marginally. Much of the increase in fresh consumption is composed of fresh imports in the off season in Canada.

[8] A discussion of the regression model for Ontario pears is found in Appendix C.

IMPORTS

Until recently competition from imports has generally been marginal. Canned imports increased from an average of slightly over one million pounds per year in the 1946-50 period to over 10 million pounds during the 1966-70 period (Table 21). The volume of fresh pears has also increased, rising from an average of 30 million pounds in the 1946-50 period to 35 million pounds in the 1966-70 period.

The major source of imports of canned pears into Canada has shifted recently from the U.S. to Australia. In 1960, U.S. imports accounted for 95 percent of the quantity imported (Table 19). In 1969, the U.S. share dropped to 27 percent and in 1971 to 17 percent. From 1960 to 1971, Australia increased its share from 5 to 77 percent. Tariff differentials may account for some of the gain in the share of Canadian imports by Australia. South Africa accounted for 4 percent of imports in 1971. The U.S. pays a two cent per pound tariff on canned pears while Australia, through a special Australian/Canadian agreement, pays no tariff. Increasing competition in the Canadian market is expected with China attempting to enter and with Australia seeking to ship more to Canada due to a loss of the U.K. market as a result of that country entering the Common Market.

APRICOTS

Canada's commercial apricot industry, although important to British Columbia's orchardists, is small in terms of total value when compared with returns from other tender fruit crops. Annual grower revenue reached a high of $174 thousand in 1962 with a five-year average of $487 thousand in the 1961-65 period. For the period 1966-70, annual average grower revenue declined to $285 thousand. The commercial apricot industry centres in British Columbia with a small, usually unrecorded, amount in Ontario.

PRODUCTION

The trend in apricot production was gradually upward, although fluctuating severely throughout the late fifties and early sixties, reaching a high of slightly over 19 million pounds in 1964 (Figure 4). Since 1964, production has declined to approximately seven million pounds (Table 28). Most of the severe fluctuations in annual production is the result of their susceptibility to late spring frosts.

In British Columbia, acreage is concentrated in the South Okanagan and Similkameen Valleys. Total acreage in 1968 was only 736 acres. Of the varieties grown, Tilton, Blenheim, and Royal are the principal ones used for canning while Wenatchie, Moorpark, Riland and Kaleden are sold predominantly on the fresh market. Three other varieties, Reliable, Perfection and Sunglow, are general purpose and are used for either processing or fresh market.

COST OF PRODUCTION

Cost data for apricots are not available for Canada nor for Michigan or Washington in the U.S. - two areas which might encounter conditions similar to those in Canada. However, based on Canada's production performance record, and the apricots' general susceptibility to late frosts, it is expected that production costs in Canada will be considerably higher than in other producing areas. In view of the lack of interest on the part of producers in growing apricots, it would appear that returns do not sufficiently exceed costs to warrant increased plantings.

VALUE OF PRODUCTION

Current apricot prices are about equal to those received in the late forties when production was at a similar level. There is no overall price trend apparent.

The total farm value of production reached a high of over $750,000 in 1964. More recent returns have averaged $500,000 per year.

UTILIZATION

Marketed in both the fresh and canned form, apricots have encountered a declining fresh market and, at best, a relatively stable canned product market (Tables 29 and 30). Although total sales of canned apricots from all sources increased significantly in the mid-fifties, they have levelled off at approximately 10 to 12 million pounds. Currently, consumption of canned apricots is

FIGURE 4. CANADIAN APRICOT PRODUCTION, 1948-71.

almost twice that of fresh apricots. Imports make up over 70 percent of the total domestic consumption of canned apricots. The volume of apricots sold by growers to processors amounts to only 40 percent of Canada's total production. The remainder of the raw product for the domestic pack is obtained from imports of fresh apricots from the U.S.

Marketing of Canadian apricots is conducted through British Columbia Tree Fruits Ltd., an agency of the British Columbia Fruit Board. Fresh apricots from British Columbia are marketed to most major Canadian cities and in some years, a few fresh apricots are exported to the U.K.

Although the domestic canned pack of apricots has declined only slightly, current canned stock levels average only 50 percent of earlier periods (Table 28). The domestic pack averaged approximately six million pounds during the 1961-65 period, while during the last five-year period, 1966-70, the pack averaged only about 4.5 million pounds.

Stocks of canned apricots have declined significantly from a high of nearly three million pounds to just under 1.5 million pounds in the period 1966-70.

IMPORTS

Total imports of fresh and canned apricots have remained relatively constant at approximately 10 million pounds per year. Although total imports have remained fairly constant, the make-up of imports has changed with the percentage of canned imports increasing and fresh imports decreasing (Table 28). Fresh imports declined from an average of approximately eight million pounds per year during the 1946-50 period (3 years only) to an average of 3.5 million pounds during the 1966-70 period. The levelling off of fresh imports combined with the slight decline in production indicate that the fresh market may be contracting. Canned imports have increased from an average of nearly six million pounds to slightly less than eight million pounds per year in the most recent period.

Despite the decline in domestic apricot production and subsequent diminishing sales by producers to processors, the processing industry has continued to pack apricots, supplemented by raw product imports. It would appear, therefore, that the Canadian processing sector, by importing fresh apricots to supplement domestic production, finds the returns sufficiently high to warrant a continuation of apricot packing.

PLUMS[9]

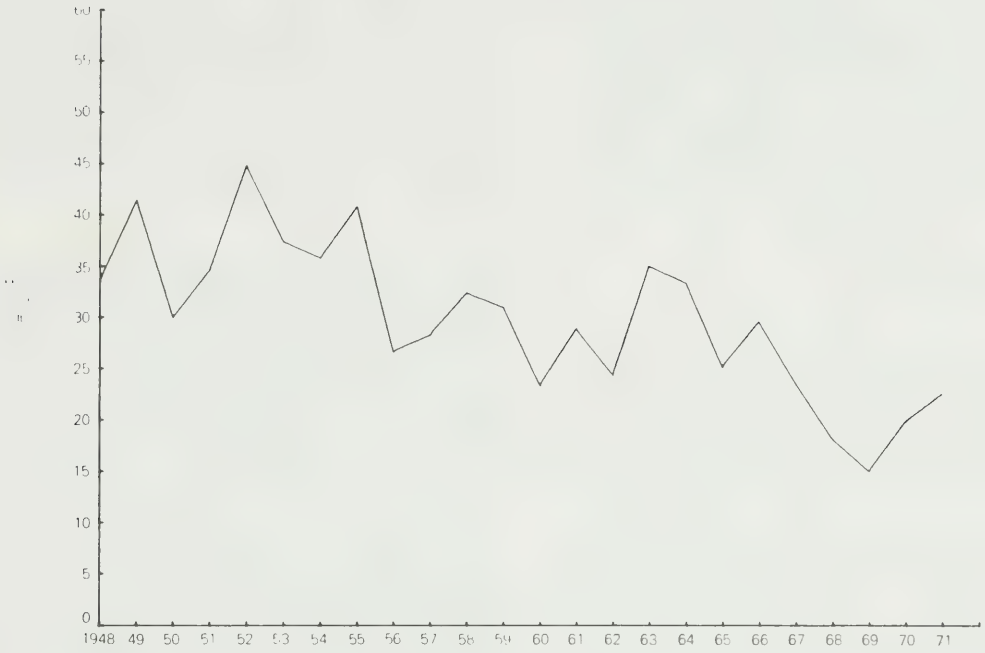

FIGURE 5. CANADIAN PLUM PRODUCTION. 1948-1971.

Canada's commercial plum (prune) industry remains relatively constant in terms of total value although declining in quantity produced (Figure 5). In terms of total farm value, returns have exceeded $1 million annually for most of the years since 1950, reaching a high of $1.6 million in 1970 (Table 31). During the same period, production declined from a high of 44 million pounds in 1952 to less than 25 million pounds in more recent years. British Columbia, Ontario and Nova Scotia are the principal producing provinces.

PRODUCTION

Production in all three provinces has followed a downward trend. Production peaked in the 1951-55 period when annual Canadian production averaged approximately 38 million pounds (Table 31). In 1955, Ontario produced a high of 28.8 million pounds. In the same year, British Columbia produced a record of 17.5 million pounds and Nova Scotia a peak of 800,000 pounds. Since the 1951-55 period, total Canadian production declined to an average of 21.2 million pounds per year in the 1966-70 period.

[9] Plums in this text includes prunes.

Although several types of plums are grown in Canada, the purple prune type plum is the most popular[10]. This prune is marketed in both the fresh and canned form. All three provinces predominantly grow the prune type plum.

COST OF PRODUCTION

According to available cost studies, plum production costs may be declining. A study of costs in the Yakima Valley in Washington, published in 1962-63, indicated a total cost per acre of $800.82. A more recent study, published in 1971, reported a total cost per acre of $597.55 (Tables 32 and 33). In the 1971 study, a yield of 12 tons was assumed which would help to explain higher harvest costs, but lower per ton costs. Most of the difference in the two studies occurred in the cultural cost area where spray material and smudging were reported at a high level in the earlier study.

Production costs in the major purple plum producing states of Michigan, Oregon and Washington, are similar.

[10] Anderson, R.W., "Michigan's Purple Plums Affect Canadian Markets". Canadian Farm Economics, Volume 7, Number 3, August 1972.

All are about $25 per ton less than in British Columbia. Cost data are not available for Ontario, but conditions there are believed to be similar to those in Michigan. If costs in Ontario are similar to those in Michigan, Ontario can expect to maintain its present market position, especially in view of the specific import tariff protection that is imposed during the harvest season. However, a recent increase in production in Michigan is resulting in low prices in that state and may eventually result in greater competition in Ontario markets[11]. In general, the plum industry in Ontario is fairly competitive with that of the U.S. on a cost per ton basis.

VALUE OF PRODUCTION

Increased prices and only a slight decline in production have resulted in an increase in total returns to the industry. An industry high of $1.6 million in total returns was reported for the 1970 crop year (Table 31). During the 1966-70 period the average annual return was $1.4 million. This was approximately 16 percent above the average annual return in the 1961-65 period. Ontario producers receive approximately two-thirds of this total. Prices averaged $84.00 per ton throughout 1961-65, increasing considerably to an average of $140.00 per ton throughout 1966-70 (Table 31). The greatest increase in prices was in Ontario.

UTILIZATION

Most of Canada's plums are sold on the fresh market. In recent years, over 70 percent of Canada's production has gone to this market (Table 31). Unlike the other tender fruit crops, plums in the fresh form are more popular than canned plums and account for approximately 80 percent of the total plum market. The apparent domestic disappearance of canned plums has actually declined slightly in recent years while the quantity of plums available for fresh consumption has remained relatively steady (Tables 29 and 30). In general the total domestic demand for plums has declined.

Fresh plums from British Columbia and Ontario constitute only a small portion of the market, with the volume of imported plums far exceeding the volume of domestic plums. Most of the imports, however, enter during the off-season and do not compete directly with Canadian plums (Table 34). British Columbia producers ship most of their plums to the major western cities while Ontario producers market in the East, particularly in Ontario and Quebec province (Table 35). Although imports constitute over 50 percent of the supply, the potential for expansion in the volume of domestically produced fresh plums may be limited because of the short season in Canada.

Statistics reveal that the Canadian annual pack of plums fluctuates significantly. When averaged in five-year periods, however, the volume packed appears to have remained quite constant (Table 31). Since 1956, the annual volume packed has ranged between 8.3 and 9.7 million pounds. This compares to an annual average pack of 13.8 million pounds in the 1946-50 period. As a percentage of domestic production, the annual pack averaged approximately 39 percent during the 1966-70 period compared to 30 percent in previous periods. With only about 25 percent of the Canadian crop entering the processing market, the processing industry in Canada is dependent on imported raw product for approximately 38 percent of their pack.

Stocks of canned plums have been variable, averaging approximately 3.1 million pounds during the 1966-70 period (Table 31).

IMPORTS

Fresh imports have increased from nearly 10 million pounds in 1951 and 1952 to a high of 30 million pounds in 1960. Imports of canned plums are very small and are not reported separately. Most of the plum imports are from the United States with some fresh plums imported in the winter months from Latin American countries. Although imports of fresh plums are not well documented as to variety, it is believed that purple prune type plums represent a sizeable portion of the imports. Since 1967 fresh imports have exceeded total Canadian production.

[11] Op.cit.

SWEET CHERRIES

Of the five tender fruit crops considered in this report, sweet cherries is the crop with the greatest potential for export. Although the current export market volume is small, the total value of exports has been as high as $4.6 million.

PRODUCTION

Despite adverse weather conditions which have caused substantial crop variations, sweet cherry production has steadily increased since the early 1950's (Figure 6).

FIGURE 6. CANADIAN SWEET CHERRY PRODUCTION 1954-71.

Production reached an all time high in 1964 totalling 27.9 million pounds (Table 36). In 1967, the industry experienced severe tree damage with a resulting crop reduction, and is now gradually recovering. Ontario tree numbers were 114,009 in 1971 down from 142,218 in 1966 (Table 37).

Although the sweet cherry is relatively hardy, the crop is susceptible to adverse weather conditions at blossom time and at or near harvest time. Excessive moisture near harvest time increases the incidence of disease and results in the swelling and spliting of the cherry. Wind storms are also a hazard at harvest time.

COST OF PRODUCTION

On a per ton basis, sweet cherries have the highest cost of production of the five tender fruit crops. In a recent study, the average cost of production in British Columbia was estimated to be approximately $424.39 per ton (Table 38). In calculating this cost, a yield of four tons per acre was assumed. In the same study, it was estimated that producer returns were nine cents per pound below the cost of production. In light of this, the production of sweet cherries is not a lucrative business for British Columbia fruit growers.

VALUE OF PRODUCTION

A high of $4.6 million in total farm value from sweet cherries was reached in 1964, more than double the level in the late 1950's. In the period 1966-70 total farm value averaged over $3 million.

Prices have generally fluctuated between $241.53 and $376.10 per ton except for 1968 when the price rose to $507.76 per ton. The long run price trend for sweet cherries is gradually upward.

UTILIZATION

Possessing characteristics suitable for both processing and fresh markets, sweet cherries encounter significant demand in both. A sweet taste and convenient size make sweet cherries particularly appealing as a fresh product. The same characteristics make sweet cherries attractive as a canned product. Even with these appealing characteristics, demand is not likely to increase very rapidly due to the high retail price of both fresh and processed sweet cherries.

Total production and canned pack have fluctuated widely as has the percentage of the crop utilized in

processing (Table 36). Exports of canned sweet cherries have generally declined, with exports in 1970 falling to a low of 1.2 million pounds. Although the canned export market is small, its very existence provides some support for the processing market.

Stocks of canned sweet cherries have remained relatively stable. Declining in years of above average exports, the level of stocks on hand is usually some indication of the quantity that will be packed in the following year. A sharp decline in exports in 1970 and 1971 resulted in above average stocks on hand in 1971.

IMPORTS

Imports have played only a small part in the fresh market. During the period 1961-65, Canada imported an annual average of approximately three million pounds of fresh sweet cherries. Since 1965 fresh cherry imports were only reported in 1969. Currently, imports of canned sweet cherries are not significant, although imported galce sweet cherries have given strong competition to the domestic product.

WORLD PRODUCTION OF PEACHES, PEARS AND APRICOTS

Production trends in major producing countries will be particularly important in the near future as trading patterns adjust to the U.K.'s entry into the Common Market. If the trend is towards increased production within the Common Market or in those countries enjoying special trade agreements with the Community, exporting countries such as Australia and South Africa, presently enjoying special trading status with the U.K., can expect increased competition and a cutback in their traditional market. At the same time, a trend towards increased production in heavily populated high income countries, such as Japan and the United States, will also affect international trade patterns.

WORLD PEACH PRODUCTION

Although Australia and South Africa are considered to be major peach producers and exporters, several other countries produce greater quantities of peaches. For example, Japan, Spain, Italy, France and Greece each produce more peaches than Australia or South Africa. However, these countries have large populations which utilize most of their domestic production. Greece and Spain each market small quantities of peaches in Europe.

With the exception of the United States, every major peach producing country has very significantly increased production. France and Italy, members of the Common Market, have experienced significant increases (Table 39). France increased total production from 244 million pounds in the mid-1960's to 1,355 million pounds in 1968, and Italy increased production from 615 to 1,955 million pounds. Most of the increase in production was in the late 1950's and early 1960's.

Although not members of the Common Market, Greece and Spain are ideally located for easy access to that market. Greece has increased production from 26 million pounds in 1948 to 363 million pounds in 1969 while Spain's production has increased from 142 to 421 million pounds. Japan, a major consumer, has increased production from 70 to 610 million pounds. Mexico, while not showing as significant an increase, has increased its production from 106 to 178 million pounds.

Japan, a major potential market, has reduced their requirements for imports through production expansion. Japan is one market where Australia and South Africa might reasonably expect to sell more peaches.

Production changes in Mexico, while not as dramatic as in other countries, are very significant by virtue of Mexico's location and stage of development. Located adjacent to the largest producer and one of the largest consuming countries, Mexico is ideally located for exporting to the U.S. In addition, seasonal production differences favour a portion of the Mexican crop. As Mexico continues to develop, peach production may grow. With improved quality and possibly lower prices than in the United States, increased exports to the U.S. from Mexico will challenge U.S. production and compete with exports from Australia and South Africa.

As a result of increasing world wide production, Australia and South Africa will be forced to look for markets where competition is less severe. One such market will be Canada. Although a small market at present an increasing population, a stable or declining production level and prices relatively high compared to other countries, will make Canada an attractive market outlet.

Production in a number of countries is apparently levelling off. This may be in response to low prices in recent years. Total world production does not appear to be heading toward a dramatic increase.

WORLD PEAR PRODUCTION

Pear production, like peach production, has increased but not as dramatically. Some countries have experienced significant increases in production while others have had only marginal increases.

In the Common Market, Italy has increased pear production considerably while France has had only a marginal increase. Italy's production rose from 723 million pounds in 1948 to 3,794 million pounds in 1970 (Table 40). Data are not available for pear production in France prior to 1961, but from 1961 to 1970, production increased from 903 to 1,122 million pounds. As a result, most of the competition within the EEC for the U.K. market will come from Italy. Spain and Greece have increased pear production to a lesser extent than peach production.

Japan and Mexico have each increased their pear production while United States' production has remained relatively constant. Japan's production increased from 92 million pounds in 1948 to 1,080 million pounds in 1970 with most of this increase occurring in the 1960's. Of some significance is the development of the pear industry in China. In 1972, for the first time, canned pears from China were marketed in cities on Canada's west coast. However, the capacity of the industry in China is unknown. In general, world pear production appears to be in a somewhat tenable position.

WORLD APRICOT PRODUCTION

World production of apricots during the 1960's indicates a slight upward trend. Spain and the United States have alternated in recent years as the major producer. U.S. production has remained relatively constant since 1948, while Spain increased production very significantly (Table 41). Spain has emerged as a major apricot exporting country, particularly to common market countries. South Africa's production has declined while Australia has gradually increased production. Production in France levelled off in the 1960's while production in Mexico, Italy and Greece gradually increased.

In light of Canada's deficit apricot production and increasing demand for apricots, world production trends indicate no serious problems for Canada in the near future.

THE UNITED STATES PEACH INDUSTRY

United States peach production, approximately 30 times greater than that of Canada, has a direct affect on the Canadian peach industry. Since 1966, Canadian peach imports have equalled total Canadian production with 80 percent of the imports coming from the U.S.

PRODUCTION

Peach production in the U.S. averaged 3,310 million pounds in the period 1955-1970 (Table 42). During this period there was no definite trend in total production although total acreage decreased and yields increased. Peaches are produced commercially in thirty-five states. California, the most important state, produces between 25 and 30 percent of the Freestone peaches and almost 100 percent of the Clingstone peaches produced in the country. Of the other peach producing states, Washington, Colorado, Michigan, Ohio, Pennsylvania, New Jersey, New York, West Virginia, South Carolina, and Georgia are prominent.

Unlike the overall U.S. trend, which has shown no evident growth pattern, California peach production has increased. In the decade 1960-69, total production in that state increased 25.3 percent. By peach types, this represents a 19.4 percent decrease in Freestone and a 47.1 percent increase in Clingstone production (Tables 43 and 44). The rapid increase in production of Clingstone peaches in California has resulted in generally low prices.

California's excess Clingstone peach supply position led to the implementation of a supply adjustment program under a federal Marketing Order. This program attempted to deal with the problems confronting the cling peach industry by providing a mechanism for economic surplus control through acreage limitations, greendrop and other measures[12]. As a result, nearly 11,500 bearing acres of cling peach orchards have been removed since 1970. Production is expected to level off as the result of this action.

Although present production capacity is being controlled, there is some uncertainty as to how a new irrigation development, the San Joaquin Valley West Side Development, will affect future production. The planting of deciduous tree fruit crops is one alternative under consideration for the new project in the San Joaquin Valley. Industry sources believe that current planting intentions, if adhered to, will result in overproduction and depressed markets again. Several large companies own sizeable tracts of this newly developed land and may grow peaches in an effort to recover variable costs while letting land appreciation or resource appreciation generate profits for the entire enterprise.

UTILIZATION

Approximately 40 percent of total U.S. peach production is sold fresh on the domestic and export markets. Another 35 percent are canned while the remainder are either frozen or dried. California processes all of their Clingstone peaches and 60 percent of their Freestone.

Although peaches are produced throughout the U.S., very little canning occurs in areas other than California. Several years ago, there were processing plants in many of the Eastern and Mid-western states of the United States that canned peaches. They encountered a situation similar to that faced by Canadian processors. Production was irregular, quality varied and growers delivered peaches to the processors only as a last resort. Competition from California was also keen and tended to keep finished product prices low. California, with consistent production, large production units, high yields and uniform quality was able to supply the Eastern and Mid-western markets with a reliable supply of a uniformly priced product. The ultimate result was the demise of the peach canning industry in these areas.

The demise of the peach canning industry is believed to be almost complete in this area of the U.S. However, several processors are canning other tender fruit or processing fruit into various other products. Based upon the similarities between the Mid-western and Eastern U.S. peach canning industry and that in Canada, it would appear that the Canadian canning peach industry is moving in the same direction.

EXPORTS TO CANADA

The U.S. exports both fresh and processed peaches to Canada. Practically 100 percent of Canadian fresh peach imports come from the U.S. Until 1963, the U.S. was virtually the only supplier of canned peaches to Canada. Since 1963, however, U.S. exporters have lost part of the Canadian market to Australia and South Africa. In 1967 and 1968, U.S. canned peach sales to Canada constituted only about 55 percent of Canadian canned peach imports (Table 45). More recently, the U.S. has regained part of its previous share of the Canadian market.

[12] California Canning Peach Association, Cling Peach Industry. Spring Issue 1971, p. 11.

THE AUSTRALIAN TENDER FRUIT INDUSTRY

Australia has become a major canned deciduous fruit exporter to the Canadian market. Imports of all canned deciduous tree fruits from Australia increased from 23,000 cases in 1961 to a high of 921,000 cases in 1968 (Table 45). Since 1968, imports of Australian deciduous fruit have declined.

PRODUCTION

Peach production increased in Australia from 119 million pounds in the mid-1940's to a high of 282 million pounds in 1968, largely as a result of increased plantings in the late 1950's. New peach plantings

declined in the mid-1960's and total production is expected to decline. Pear production increased from 50 million pounds in the mid-1960's to a high of 405 million pounds in 1970. Pear production is expected to continue increasing as heavy plantings occurred in 1967-68.

Production forecasts for 1975 call for a slight increase in pear production and a static situation for peaches[13]. If the tree removal program currently in force is successful, the estimated production for 1975-76 is 173,000 tons, a slight decline from recent production levels. However, if the tree pull program is not successful production in 1975-76 could reach 230,000 tons.

The pack of canned deciduous fruit rose throughout the 1956-72 period. The increase was from 4.7 to a high of 11.5 million cases. The major canned deciduous fruit crops were peaches and pears (Table 47). Peaches led with a pack increase from 1.7 million cases in 1961 to a high of 5.1 million cases in 1968. The pear pack increased similarly from 2.6 million cases in 1961 to a high of 4.4 million cases in 1970.

MARKETING

Australian sources report that, at present, the domestic market absorbs approximately one-third of Australia's total production of canned deciduous fruit[14]. Per capita consumption of canned fruit has increased significantly, reaching a high of 23.9 lbs. in 1967-68 (Table 48). This compares to Canadian per capita consumption of six to eight lbs. per capita (Table 29). When combined with the consumption of fresh fruit, a very high level of total per capita consumption of fruit is evident. A consumption level of this magnitude would suggest that there may be little potential for increased sales in Australia (Table 49).

Despite a domestic market that appears close to saturation, Australia is embarking on a domestic promotion program. It is the thought in Australia that with price and income apparently ineffective as demand shifters, promotion is the stimulus required to increase per capita consumption further.

Absorbing approximately two-thirds of the total deciduous canned fruit production, Australia's export program represents the mainstay of the industry. Led by significant increases in peach and mixed fruit sales, the export market expanded dramatically in the 1960's. Mixed fruit exports increased from a five-year annual average of 103,000 cases during the 1956-60 period to 1.4 million cases in 1970. Peach exports doubled to a high of 4.1 million cases in 1968. Total exports of all canned deciduous tree fruits reached a high of 8.6 million cases in 1968 (Table 50). Although total exports have declined slightly since 1968, they remain at approximately six million cases per year.

The United Kingdom which is the major buyer, western Europe, the United States, Japan and Canada account for most of Australia's export market. Conditions in each of these markets are currently under change. As a result, Australia is concerned over the future of their export market.

Importing virtually all of its canned deciduous supplies, the U.K. imports 38 percent of Australia's total production, which in turn represents 59 percent of Australia's total exports. With the entry of the U.K. into the EEC, Australia will be denied its present preferential status[15]. While countries within the EEC, such as Italy, move to a position of duty free access to the U.K., Australia will move to one of high duties. In light of this, other foreign markets can expect increased pressure from Australian exports.

Of the major importing markets in continental Western Europe, (Germany, Netherlands, Sweden, Denmark and Belgium-Luxembourg) the Federal Republic of Germany is by far the largest importer of canned deciduous fruit. Australia and South Africa steadily increased their share of this market at the expense of the United States until 1968. In 1968, Australia discontinued their program of market development allowance payments and, with lower total production levels, a portion of this market was lost.

Australia is optimistic that European consumption will increase from the present levels of approximately six to eight pounds per capita to a level of between 18 and 25 pounds, more on a level equal to consumption in Canada, the United States and Australia. The opinion of Australia's experts is that expected production in the common market will not be sufficient to meet the anticipated demand and that Australia will be in a position to supply a portion of the deficit. They do not

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[13] The Secretariat of the Organization for Economic Co-operation and Development, "Market Forecasts for 1975 for Certain Fruit and Vegetables". An interim note prepared for Working Party No. 5 of the Committee for Agriculture (Fruit and Vegetables), Paris, 2nd February, 1973.

[14] The Australian Government Publishing Service, "The Outlook for Fruit". Released for the National Agricultural Outlook Conference in Canberra, 1971.

[15] Bureau of Agricultural Economics. "Export Market Prospects for Australian Canned Deciduous Fruits". Occasional Paper No. 6, November 1971, Canberra.

see this potential increase, however, as being sufficient to offset the loss expected in the U.K. market.

Periodic shipments of canned pears represent the major deciduous fruit shipments by Australia to the United States. Recently, the U.S. Customs Bureau, on request from the processing industry, investigated the claim that Australian pears were being sold in the U.S. at less than fair value prices. On March 1, 1973, the U.S. Tariff Commission determined that canned Bartlett pears from Australia were likely to cause injury to the U.S. industry[16]. As a result, a dumping duty was imposed on Australian canned pears entering the U.S. Consequently, the potential for increased sales of canned fruit to the U.S. is not clear.

In general, Australia foresees very little in the way of market expansion in Canada. They assess the Canadian market as having relatively constant total supplies of both peaches and pears, declining domestic production of peaches (already being compensated for by greater imports) and relatively constant supplies of canned pears from domestic production and imports. Until 1967, Australia increased its share of the Canadian peach market, but since then has lost ground to the U.S. This was partially due to more aggressive competition on the part of the American industry, some decline in Australian production and removal of the market development allowance. They estimate that Canada's canned peach imports will increase by approximately 1.5 percent per year, in line with population growth. As for pears, total usage in Canada, in their estimation, is not expanding greatly and domestic production is maintaining its share of the market. Lower prices for canned pears were suggested as one way of increasing Australian sales, but action of this type is expected to encounter opposition from Canada.

Australian sources point out that the Japanese market is characterized by an increasing domestic supply of peaches, a preference for white peach varieties, heavy domestic pear production, processed pear consumption of only 0.2 lb. per head[16], total canned fruit consumption of approximately 7 lbs. per head and a duty rate of 25 percent[17]. A great potential exists for exports to Japan, but there are many problems to overcome. To open the market to yellow peach varieties will require a considerable amount of promotion. Low canned pear and canned fruit consumption suggests that significant increases in sales are possible, especially if consumption can be increased to levels currently existing in Australia, the U.K. and the U.S. Domestic production possibilities are not well known, but if demand expanded rapidly, domestic production would likely be insufficient to meet the demand in the short term. If the high ad valorem duty on imports into Japan is lowered in the next round of GATT negotiations, a definite potential for exports to Japan could develop.

[16] United States Tariff Commission, T.C. Publication 551, dated March 1973. Washington.

[17] Bureau of Agricultural Economics. Export Market Proposals for Australian Canned Deciduous Fruits. Occasional paper No. 6, November 1971, Canberra. ACT. p. 33.

TENDER FRUIT MARKETING IN CANADA

Two broad market channels exist for each of the five tender fruit crops - the fresh market and the processing market. Except for Bartlett and Keiffer pears in Ontario, the greatest percentage of the tender fruit production is retailed in the fresh state. The channel utilized depends to a great degree upon the variety grown, production techniques and harvesting procedures. There are, for example, a number of reddish coloured varieties of peaches which are very suitable for the fresh market but are unacceptable for the processing market. Consequently, these varieties may only be marketed for fresh consumption. Harvesting of fruit for the fresh market is particularly critical as bruising must be avoided. Fresh market varieties tend to be less firm than processing varieties and, therefore, more difficult to process.

THE FRESH MARKET

Fresh fruit may move directly from the producer to the consumer or may go through several intermediaries in the marketing channel. Recently, an increasing number of growers are selling directly to consumers through "pick-your-own" operations or through on-farm roadside stands. Many growers market through grower

marketing organizations such as the Ontario Fresh Fruit Growers Marketing Board in Ontario or B.C. Tree Fruits, the marketing agency of the British Columbia Fruit Growers Association. In addition, some growers sell directly to wholesale or retail buyers or to roadside marketing operations.

Direct sales to consumers by producers varies according to the crop involved and the province. In British Columbia, the percentage of the various crops sold through roadside markets differs appreciably among fruit crops (Table 51). The percentage of the production of plums and peaches sold on roadside stands in 1971 was 66.5 and 46.5 respectively. Sweet cherries and apricots were next in volume sold with 15.5 and 14.3 percent respectively sold through roadside markets. Roadside sales of pears account for only 7.3 percent of production while roadside sales of prunes account for 6.4 percent of the crop. On a value basis, however, roadside sales account for a higher percentage of the total because of the higher prices obtained at these markets (Tables 51 and 52).

In Ontario, approximately 80 percent of the Kieffer pear variety and 52 percent of the Bartlett pear variety are sold for processing (Tables 53 and 54). Few, if any, Kieffer pears are sold through roadside markets while 22 percent of the Bartletts are sold through such outlets. Approximately 40 percent of the Ontario sweet cherry production and 28 percent of the peach production is marketed through roadside outlets.

A sizeable quantity of fresh fruit is sold through regular retail outlets. In British Columbia over two-thirds of the pears, prunes and sweet cherries are sold through regular retail outlets (Table 51). With the exception of peaches, a smaller percentage of Ontario tender fruit crops is sold at retail than of British Columbia fruit crops (Table 53).

The British Columbia Fruit Growers Association controls all sales through its agency, the B.C. Tree Fruit Agency. This agency coordinates sales, negotiates prices to wholesalers and retailers, and monitors roadside market sales. In Ontario, the Ontario Fresh Fruit Growers Marketing Board coordinates sales and provides price leadership. Unlike British Columbia, where all fresh fruit destined for the market must go through the B.C. Tree Fruit Agency, Ontario fresh fruit may by-pass the Ontario Marketing Board. Consequently, the Ontario Board has less impact on the market than does the B.C. agency.

With respect to physical movement, fresh fruit may be handled by one or several market intermediaries. On the producer-owned roadside markets, often only the producer handles the fruit. They may do all their own grading, packaging, promotion and selling. If a producer sells to the owner of another roadside stand, the producer will provide some grading and packaging but the roadside stand owner will be responsible for final packaging, promotion and selling. In the case of commercial sales, producers are usually responsible for initial grading and packaging and may deliver to handlers, wholesalers, or retailers. If the sale is to a handler, the produce may be delivered "tree run" and the handler will grade and package the fruit and ship it to wholesalers or retailers. Occasionally, wholesalers will grade and repackage for final sale through retail units. In the case of a direct sale from producer to retailer, the retail outlet will be responsible for promoting and selling in every situation regardless of the other marketing functions involved.

THE PROCESSING MARKET

Although there is a variety of processed products, the predominant type is a canned, heavy syrup pack. The remaining portion of the crop sold for processing is used for baby food, preserves and various related dessert uses.

In terms of structure, the industry consists of a large number of producers, a relatively small number of processors, a producer marketing organization in both major producing provinces and a significant number of wholesale and retail establishments. Processing prices are generally determined through negotiations between the canners and the Tender Fruit Marketing Board in Ontario and the B.C. Tree Fruit Agency in British Columbia on behalf of the growers.

Many processing firms market all of their product directly to only one major retail chain while others ship to several retail and wholesale outlets. Although there are more retail chains and buyers than there are processors, processors are not in a preferred marketing position as imports are available as an alternative.

A sharp decline in the number of firms canning fruit suggests that the processing segment of the industry is undergoing a period of significant adjustment. The sharpest decline in the number of plants is in Ontario where the number of peach and pear canning plants declined from 19 in 1965 to the present four firms (Table 55). Most of the canning firms or plants ceased operations entirely, while a few plants were purchased by other firms remaining in the industry. An exodus of this magnitude suggests that returns on investment are greater in other areas and that the tender fruit canning

sector is in a state of decline. At present the remaining firms appear to be in a stage of decision as to whether to continue or cease operations.

Much of the energy of the canning industry has been directed towards remaining competitive with imports. This has included cutting costs where possible, accepting lower returns, limiting promotion and little or no new product development. As a consequence of low operating budgets and low profitability, the industry is suffering from a lack of new capital investment. If the overall economic climate of the tender fruit canning sector does not improve, it is reasonable to expect that more firms will leave the industry, possibly resulting in a complete abandonment of the canning segment of the industry.

SUMMARY

Farm cash receipts from tender fruit totalled approximately $20 million in 1970, double the value in 1956 and preceeding years (Table 56). Although comprising a relatively small percentage of the total agricultural income in Canada, gross receipts from tender fruit are of major importance to the areas in which production is concentrated. The growth in gross receipts from tender fruit has been more rapid than for all fruit combined (Table 57). As a percentage of total gross receipts from all fruit, tender fruit averages about 23 percent.

Production of, and cash receipts from, each individual tender fruit crop have exhibited a variety of trends. Receipts from peaches have increased over the past twenty years despite a significant drop in production. The upward trend in total receipts was largely due to a greater emphasis on the fresh market where prices have almost doubled. Cash receipts from pears have increased marginally, coinciding with an increase in pear production. In contrast, production of apricots has declined significantly with an accompanying decline in gross receipts. Plum production is in a state of decline, although cash receipts have maintained fairly constant levels. Sweet cherry production and cash receipts have remained relatively constant.

The general increase in cash receipts from tender fruit, in the face of a general decline in production, has primarily been the result of an increase in fresh market prices and an accompanying larger percentage of the crop delivered to that market. In essence, the tender fruit industry has become predominantly "fresh" market oriented.

Looking at the two major commodities, peaches and pears, which together made up 88 percent of the volume processed in 1971, it is apparent that there has been a significant decline in the percentage of the total crop processed. In 1971, approximately 34 percent of the Canadian pear crop was processed compared to an average of 40 percent in the 1959 to 1963 period. The portion of the peach crop processed in 1971 fell to 19 percent from an average of 36 percent.

Because of increasing demand for fresh fruit and resulting higher prices, tender fruit was diverted by the producer to the fresh market. The volume marketed through conventional fresh market channels increased. For those producers who were conveniently located, a new opportunity opened with the increased popularity of "pick-your-own" and farm or roadside markets. As an outlet for fresh tender fruit, farm retailing has become a very important factor.

The declining processing segment of the tender fruit industry has evolved into a more or less residual position. Although prices for fruit in the processing sector have increased, they have not kept pace with returns realized from fresh market sales. As a result, the volume of fruit now processed is derived from: (1) producers who gear their operation primarily to the fresh market but sell their excess to processors, particularly in years of high production; (2) the production of growers unable, at present, to gain a portion of the fresh market because of location, lack of buyer contacts, etc; (3) those growers who believe the processing segment is important to them and who deliver a portion of their crop to the processors regardless of the fresh market situation; and (4) the production of those varieties not well suited to the fresh market.

Currently, the domestic industry is supplying only a small percentage of the total Canadian requirements of canned tender fruit. With total consumption remaining high, although fluctuating, imports have made up the large deficit. Currently, imports account for over 70 percent of the canned tender fruit consumed in Canada. Since 1969, imports from the U.S.A. have accounted for between 70 and 90 percent of the total imports.

In Ontario, only four firms process an appreciable quantity of tender fruit in syrup. In general, however,

the canning of tender fruit is only a portion of their activity. In British Columbia, several firms still process peaches and other tender fruit, although a considerable quantity of their raw product is imported.

The per capita consumption of fresh and canned tender fruit is expected to increase marginally. With little likelihood of a significant expansion of tender fruit production in British Columbia or Ontario, an increasing deficit in total available supplies of domestically produced tender fruit is evident. An ever increasing percentage of the total domestic production will be directed to the fresh market. This will result in an even greater deficit in the volume of domestically produced tender fruit available for canning in Canada.

The tender fruit industry in Canada is undergoing somewhat the same pattern of change as occurred in the Northeastern and Midwestern regions of the U.S. nearly 20 years ago. The canning segment of the industry in the U.S. provided a stabilizing influence on prices on the fresh market, as it has in Canada. However, as fresh market demand increased, fresh market prices increased and producers directed an increasing portion of their crop, especially peaches, to this market. The processing segment could not survive on uncertain supplies or surplus removal. Thus the canning of peaches, as we know it, has disappeared in the Northeastern and Midwestern states. The demise of peach canning in these regions was also influenced by the greater comparative advantage of the cling peach industry in California[18].

[18]Yield differentials are perhaps the most significant variable as far as comparative advantage is concerned. Cling peach yields in California average over 15 tons per acre while in Canada and Eastern and Midwestern U.S., yields average only 5 to 8 tons per acre.

The tender fruit industry in the Northeast and Midwestern regions still exists and thrives, but it is oriented to the fresh market with some processing of tender fruit into types of finished products other than canned fruit in syrup.

Several factors adversely affect the maintenance of a viable tender fruit canning sector in Canada. Some of these factors are listed below:

1. A lack of continuity of supply of the raw product to processors.
2. Relatively high costs of producing tender fruit, especially peaches, in Canada.
3. Relatively strong demand and high prices on the fresh market.
4. Adverse climatic and geographic conditions which confine production location and size of operations.
5. Pressures of urban expansion in production localities.
6. The small size of grower operations and the large number of producers.
7. A preference by processors, buyers and some consumers for canned Clingstone peaches (not extensively produced in Canada), rather than for Freestone.
8. High domestic processing costs brought about, in part, by unused capacity.

If based on surplus removal from the fresh market, it is evident that the canning segment of the tender fruit industry will be unable to survive. Many plants or firms have already quit the industry. With the continuation of conditions as they are presently found in the industry, the canning sector will decline further. However, this does not mean that the production and marketing of fresh tender fruit, as well as the processing of other types of products will not continue to be profitable.

Appendix - A

TABLE 1. PERCENT OF THE TOTAL TENDER FRUIT VALUE REPRESENTED BY EACH FRUIT[1]

Year	Apricots % of Total		Peaches % of Total		Pears % of Total		Plums[2] % of Total		Sweet Cherries % of Total	
1950	1.35		48.11		32.79		17.75			
1951	1.61	)	55.43	)	30.98	)	11.98	)		
1952	3.84	)	57.90	)	26.65	)	11.61	)		
1953	4.30	) 3.21	56.19	) 57.35	26.94	) 26.88	12.67	) 12.55		
1954	3.18	)	56.52	)	24.38	)	15.92	)		
1955	3.13	)	60.72	)	25.57	)	10.59	)		
1956	2.33	)	52.65	)	34.26	)	10.76	)		
1957	4.50	)	53.48	)	18.93	)	8.14	)	14.96	)
1958	3.64	) 3.97	47.29	) 50.01	24.51	) 24.96	9.80	) 9.09	14.77	) 14.95
1959	4.22	)	49.51	)	21.42	)	9.31	)	15.53	)
1960	5.18	)	47.14	)	25.69	)	7.45	)	14.54	)
1961	4.45	)	47.46	)	22.05	)	8.94	)	17.09	)
1962	5.12	)	41.47	)	24.89	)	7.39	)	21.12	)
1963	2.06	) 3.16	43.78	) 44.96	25.25	) 23.33	9.06	) 8.45	19.85	) 20.09
1964	4.05	)	43.70	)	21.20	)	6.30	)	24.75	)
1965	0.11	)	48.38	)	23.28	)	10.58	)	17.65	)
1966	3.09	)	42.84	)	24.43	)	8.12	)	21.05	)
1967	1.94	)	40.67	)	26.04	)	7.70	)	23.66	)
1968	2.54	) 2.05	45.85	) 46.48	25.91	) 24.32	7.24	) 7.72	18.45	) 19.33
1969	0.07	)	55.48	)	20.57	)	7.69	)	16.20	)
1970	2.63	)	47.58	)	24.64	)	7.86	)	17.28	)

[1] Years 1950-1956 represent four crops — peaches, pears, plums and apricots. The Years 1957-1969 includes the above four plus sweet cherries.

[2] These figures include prunes.

SOURCE: Crop and Seasonal Price Summaries.

TABLE 2 — CANADIAN PEACH PRODUCTION IMPORTS, PACK, STOCKS, PRICES, FARM VALUE, SALES FOR PROCESSING AND SUPPLY OF CANNED FRUIT, 1946-71[1]

Year	Production 000's of lbs.	Fresh Imports 000's of lbs.	Canned Exports 000's of lbs.	Canned Imports 000's of lbs.	Domestic Pack 000's of lbs.	Canned Stocks[2] 000's of lbs.	Average Price $/Ton	Farm Value 000's of $
1946	107,250	22,090	1,228	a	37,200	2,906	92	5,365
1947	84,050	29,536	1,036	a	34,587	3,426	84	4,508
1948	88,000	n.a.	234	a	37,664	7,464	99	4,953
1949	100,550	n.a.	56	a	46,875	8,615	87	4,987
1950	61,100	17,457	41	a	39,143	13,424	90	2,754
1951	89,600	17,469	41	a	51,253	13,671	89	4,004
1952	145,850	16,915	80	a	39,493	25,356	71	5,152
1953	144,650	18,567	49	a	39,199	20,994	77	5,543
1954	121,250	24,902	973	12,140	52,340	9,603	86	5,208
1955	144,150	12,794	2,922	10,918	66,455	13,064	85	6,125
1956	83,350	39,950	2,724	14,627	39,133	20,514	105	4,384
1957	140,050	21,196	299	22,687	63,455	13,940	89	6,218
1958	152,150	26,667	3,338	21,853	56,036	20,401	76	5,761
1959	132,250	32,062	1,841	19,386	44,536	12,766[b]	82	5,444
1960	118,100	47,257	554	32,159	50,614	8,802[b]	104	6,137
1961	153,750	36,550	450	29,529	60,469	13,494[b]	87	6,674
1962	112,800	31,600	1,695	28,804	40,345	18,947[b]	103	5,784
1963	118,650	36,150	245	36,008	42,721	9,875[b]	117	6,933
1964	143,100	18,500	174	40,359	45,452	8,724[b]	114	8,128
1965	80,300	46,450	171	53,709	28,482	10,134[b]	138	5,531

TABLE 2 – CANADIAN PEACH PRODUCTION IMPORTS, PACKS, STOCKS, PRICES, FARM VALUE, SALES FOR PROCESSING AND SUPPLY OF CANNED FRUIT, 1946-71[1] (continued)

Year	Production 000's of lbs.	Fresh Imports 000's of lbs.	Canned Exports 000's of lbs.	Canned Imports 000's of lbs.	Domestic Pack 000's of lbs.	Canned Stocks[2] 000's of lbs.	Average Price $/Ton	Farm Value 000's of $
1966	104,250	34,000	40	58,716	29,475	5,288[b]	142	7,434
1967	82,300	23,932	143	65,991	15,708	8,443[b]	176	7,207
1968	95,800	40,564	57	67,560	22,187	2,220[b]	188	8,963
1969	83,000	50,036	Nil	74,156	20,831	6,197[b]	216	8,935
1970	109,830	33,486	Nil	50,866	16,706	7,830[b]	180	9,863
1971	125,850	34,760	Nil	59,978	21,416	5,711[b]	178	11,166

[1] All weights are net weights.

[2] Domestic stocks only as of June 30 of the year.

[3] Supply of Canned fruit = Stocks plus pack.

[a] These figures exclude stocks held by retail and warehouses.

[b] Combined with Canned Apricots Imports and not separable.

n.a. – not available.

SOURCE: Statistics Canada

TABLE 3 – REGIONAL PEACH, PRODUCTION, VALUE AND PRICES

	British Columbia Peaches			Ontario Peaches		
Year	Production	T.F.V.[1]	Price Paid to Producer[2]	Production	T.F.V.[1]	Price Paid to Producer[2]
	'000 lb	'000$	$/ton	'000 lb	'000$	$/ton
1946	33,450	1,854	110.80	73,800	3,502	94.80
1947	37,900	1,842	97.20	46,150	2,286	99.20
1948	36,500	1,655	90.80	51,500	2,716	105.60
1949	38,650	1,663	86.00	61,900	2,702	87.20
1950	4,150	260	125.20	56,950	2,494	87.60
1951	22,200	1,135	102.40	67,400	2,869	85.20
1952	27,200	768	56.40	118,650	4,384	74.00
1953	27,150	978	72.00	117,500	4,565	77.60
1954	13,550	554	81.60	107,700	4,654	86.40
1955	25,650	890	69.20	118,500	5,235	88.40
1956	15,000	658	87.60	68,350	3,726	108.80
1957	26,750	929	69.60	113,300	5,289	93.20
1958	22,750	875	76.80	129,400	4,886	75.60
1959	25,100	989	78.80	107,150	4,455	83.20
1960	29,450	1,143	77.60	88,650	4,994	112.80
1961	26,550	1,109	83.60	127,200	5,565	87.60
1962	31,150	1,214	78.00	81,650	4,570	112.00
1963	21,600	1,089	100.80	97,050	5,844	120.40
1964	35,850	1,385	77.20	107,250	6,743	125.60
1965	NIL	NIL	NIL	80,300	5,531	137.60
1966	18,050	1,255	139.20	86,200	6,179	143.20
1967	22,100	1,490	134.80	60,150	5,717	190.00
1968	17,900	1,638	184.00	77,900[a]	7,325	188.00
1969	NIL	NIL	NIL	83,000[a]	8,935	216.00
1970	20,100	1,895	188.00	89,750[a]	7,968	178.00
1971	25,800	2,226	182.00	101,300	8,940	176.00
1972	26,700[p]			78,600[p]		

[1] T.P.V. = Total Farm Value

[2] Weighted average of fresh and processing sales

P – Preliminary

[a] Marketed production only

SOURCE: Crop and Seasonal Price Summaries, C.D.A.

TABLE 4 – PEACH ACREAGE AND PRODUCTION TRENDS IN ONTARIO, 1950-71

Year	Total Acreage	Yield tons/acre	Returns/Acre
1950	15,570	1.8	160
1951	16,265	2.1	177
1952	16,052	3.7	273
1953	15,852	3.7	288
1954	15,896	3.4	294
1955	16,165	3.7	324
1956	16,455	2.1	226
1957	14,540	3.9	364
1958	14,520	4.5	336
1959	13,855	3.9	329
1960	13,865	3.2	360
1961	13,810	4.6	402
1962	12,033	3.4	380
1963	11,104	4.4	493
1964	11,079	4.9	609
1965	11,069	3.6	500
1966	11,069	3.9	558
1967	10,133	3.0	565
1968	10,148	3.9	722
1969	10,182	4.2	878
1970	10,169	4.4	784
1971	10,169	5.2	879

SOURCE: Ontario Ministry of Agriculture and Food.

TABLE 5. PEACH TREE COUNT IN ONTARIO, 1956, 1961, 1966 AND 1971 SURVEY.

Variety	1956	1961	1966	1971	1971 as a % of 1966
	No. trees	No. trees	No. trees	No. trees	percent
Earlired	–	–	27,210	46,228	169.89
Dixired	–	–	15,658	9,740	62.20
Redcap	–	–	2,835	4,982	175.73
Royalvee	–	–	16,519	16,587	100.41
Garnet Beauty	–	–	13,875	25,850	186.31
Sunhaven	–	29,033	65,681	75,749	115.33
Harbelle	–	–	–	7,749	–
Earliglo	–	–	1,525	9,613	630.36
Jerseyland	17,810	22,696	12,146	5,252	43.24
Red Haven	92,020	136,629	133,006	168,111	126.39
Golden Jubilee	322,940	325,011	235,634	137,048	58.16
Envoy	22,450	33,738	45,444	43,095	94.83
Velvet	–	–	5,003	17,762	355.03
July Elberta	28,040	30,379	21,451	8,303	38.71
Harmony	–	–	–	8,218	–
Valiant	54,890	38,131	18,033	8,709	48.29
Loring	–	29,177	53,362	80,511	150.88
Veteran	74,360	58,289	45,274	29,998	66.26
Vanity	–	–	–	7,874	–
Olinda	–	–	–	3,199	–
McGuigan	12,800	22,942	25,486	16,632	65.26
Early Elberta	49,050	66,820	52,104	32,083	61.57
Madison	–	–	–	15,344	–
Cresthaven	–	–	–	7,616	–
Redskin	–	16,189	23,407	22,862	97.67
Standard Elberta	313,600	239,010	136,261	55,887	41.01

TABLE 5. PEACH TREE COUNT IN ONTARIO, 1956, 1961, 1966 AND 1971 SURVEY. (continued)

Variety	1956	1961	1966	1971	1971 as a % of 1966
Babygold 5	–	–	13,303	21,835	164.14
Babygold 6	–	–	9,361	8,997	96.11
Babygold 7	–	–	18,935	22,922	121.06
Babygold 8	–	–	8,687	4,461	51.35
Suncling	–	–	2,863	5,488	191.69
Other Varieties	299,190	221,799	93,806	49,688	52.97
TOTAL	1,287,150	1,269,843	1,096,869	978,383	89.20

SOURCE: 1971 Fruit Tree Census Part II, Tender Fruits, Ontario Ministry of Agriculture and Food.

TABLE 6. MAJOR PEACH VARIETIES GROWN IN THE NIAGARA FRUIT BELT AND IN SOUTH-WESTERN ONTARIO.

	Variety as a % of Total No. of Trees in Ontario	
Variety	Niagara	Southwestern Ontario
Golden Jubilee	12.70	1.30
Standard Elberta	5.50	0.21
Redhaven	10.77	6.38
Sunhaven	6.70	1.04
Loring	6.75	1.48
Early Elberta	1.93	1.34
Envoy	2.40	2.01
Veteran	2.93	0.13
Earlired	3.82	0.91
McGuigan	1.68	0.02
Redskin	1.92	0.41
Royalvee	1.61	0.08
Garnet Beauty	0.70	1.94
Velvet	1.55	0.26
Madison	1.30	0.27
Babygold 5	1.78	0.45
Babygold 7	1.80	0.54

SOURCE: 1971 Fruit Tree Census Part II, Tender Fruits – Ontario Ministry of Agriculture and Food.

TABLE 7. PEACH ACREAGE AND PRODUCTION TRENDS IN B.C., 1961-1970 AND FORECAST 1971-1975

Year	Gross Crop[2] 000's of lbs	Total Bearing Average acres	Yield Per Bearing Acre tons
1961	23,508	2,259	5.2
1962	28,389	2,271	6.2
1963	19,287	2,286	6.0
1964	30,063	2,302	7.4
1965[1]	–	–	–
1966	14,523	1,641	6.9
1967	15,381	1,784	6.5
1968	10,552	1,788	6.3
1969[1]	–	–	–
1970	9,184	1,656	7.0
			Average 6.65
		Forecast[1]	
1971		1,655	6.65
1972		1,800	6.65
1973		1,918	6.65
1974		1,974	6.65
1975		2,048	6.65

SOURCE: Crop Forecast to 1975 DJ. Sutherland April 1971 B.C. Tree Fruits Ltd.

[1] Data for 1965 and 1969 are omitted from calculations

[2] Commercial crop – culls excluded – includes Fruit Stand Sales

TABLE 8. — COST OF PRODUCING PEACHES IN ONTARIO 1972[1].

Operation	Cost per Acre	Cost per Ton
	— dollars —	
CULTURAL COSTS:		
Replant	$ 12.75	
Prune	60.75	
Brush removal[a]	11.05	
Cultivation	10.00	
Mulch	33.75	
Fertilizer	17.55	
Weed control	13.50	
Spraying	115.00	
Thinning[b]	60.75	
Deadwood removal[a]	23.95	
Mowing[c]	24.00	
Stump removal[a]	8.25	
Broken limb removal[a]	4.00	
Other maintenance	2.30	
Total	$397.60	$79.52
OVERHEAD COSTS:		
Building (interest & depreciation)	22.50	
Land (interest)	160.00	
Taxes	25.00	
Tile drains (depreciation)	22.50	
Total	$230.00	$46.00

TABLE 8. (continued)

Operation	Fresh Market	Process Market	Fresh Market	Process Market
	$'s per acre	$'s per acre	$'s per ton	$'s per ton
Harvest Costs: (5 tons per acre)				
Picking	202.50	157.50	40.50	31.50
Distribution and hauling	21.00	21.00	4.20	4.20
Grading and Packing	57.60	36.00	11.52	7.20
Containers[d]	258.00	—	51.60	—
Total	539.10	214.50	107.82	42.90
TOTAL COST	$1,166.70	$842.10	$233.34	$168.42

[1] Costs were obtained from a group of nine Niagara peach growers at a joint meeting. In general, the growers were above average in both management and location. The costs presented in this Table are average expected costs for above average growers.

[a] These four costs may have been included in the prunning costs for British Columbia.

[b] Not all growers may thin nor may they thin every year.

[c] This cost appears high and may be adjusted prior to final publication.

[d] Includes: 384 masters @ 28¢ each; 1,536 4-qt. baskets @ 9¢ each plus a small cost for pack material.

SOURCE: Ontario Ministry of Agriculture and Food - Mr. Robert Wilcox, Extension, Vineland; Mr. Errol McKibbon, Farm Economics, Vineland.

TABLE 9. — COST OF PRODUCING REDHAVEN PEACHES IN BRITISH COLUMBIA. (8 Ton Yield).

Operation	Cost Per Acre	Cost Per Ton
	— dollars —	
CULTURAL COSTS:		
Pruning	121.25	15.16
Thinning	220.00	27.50
Spraying	57.29	7.16
Fertilizer	17.05	2.13
Mowing	15.08	1.88
Irrigating	47.24	5.90
Weed Control	11.24	1.40
Total Cultural Costs	478.65	59.83
HARVEST COSTS:		
Bins — to farms	10.00	1.25
Bins — in and out of orchards	16.75	2.09
Bins — to packing house	18.00	2.25
Picking	133.76	16.72
Total Harvest Cost	178.51	22.31
CASH OVERHEAD:		
Misc. office (5% of cash costs)	32.86	4.11
Taxes — Water $30, Land $22	52.00	6.50
Total Cash Overhead	84.86	10.61
MANAGEMENT: (5% of Estimated Gross Income)	80.00	10.00
INVESTMENT:		
Land	204.75	25.59
Crop	151.20	18.90
Buildings	26.28	3.28
Equipment	180.56	22.57
Total Investment	562.79	70.35
TOTAL COST PER ACRE	1,354.81	169.35

SOURCE: British Columbia Department of Agriculture. Feb. 23, 1972.

TABLE 10. COST OF PRODUCING PEACHES IN THE NIAGARA PENINSULA 1965-67[1] (Yield 3.8 Tons Per Acre)

Operation	Cost Per Acre	Cost Per Ton
	— dollars —	
CULTURAL COSTS:		
Labor	74.72	
Tractor	15.34	
Machines	24.71	
Custom machine rental	.87	
Trees	8.75	
Fertilizer	11.45	
Manure	14.82	
Spray	31.20	
Other	3.56	
Total Cultural	185.42	48.79

TABLE 10. (Continued)

Operation	Cost Per Acre	Cost Per Ton
	— dollars —	
HARVEST COSTS:		
Labor	122.68	
Tractor	4.62	
Machinery	6.63	
Custom and misc.	.02	
Material	3.54	
Other costs	3.58	
Total Harvest	131.07	34.49
FIXED COSTS:		
Land		
Interest	119.46	
Taxes	12.93	
Rent	.35	
Buildings		
Interests	15.24	
Depreciation	12.70	
Taxes	3.86	
Insurance	.78	
Other	8.82	
Total Fixed	174.14	45.82
Total All Costs	490.63	129.10

[1] These are average costs from a sample of farms over the three year period.

SOURCE: "Peach Production in the Niagara Peninsula" Production Costs, Returns and Management Practices 1965-67. Farm Economics, Co-operatives, and Statistics Branch, Ontario Department of Agriculture and Food, February 1969.

TABLE 11. SAMPLE COST TO PRODUCE PEACHES IN SOUTHWESTERN MICHIGAN. 1969. (Yield = 200 Bushels or 5 Tons Per Acre).

Item	Cost Per Acre $	Total $	Cost Per Ton
CULTURAL COSTS:			
Labor	183.513		
Machinery	22.804		
Spray Material	36.384		
Other Material	28.280		
Total Cultural Cost		270.981	54.196
HARVESTING COSTS:			
Labor	80.640		
Machinery	7.360		
Total Harvesting Cost		88.000	17.600
FIXED COST:			
Machinery & Building	65.308		
Orchard Overhead	147.000		
Total Fixed Costs		212.308	42.461
Total Cost Per Acre:		571.289	
Total Cost Per Ton:			114.257

SOURCE: Agricultural Economics Report #123, Department of Agricultural Economics, Michigan State University, May 1969.

TABLE 12. CLINGSTONE PEACH PRODUCTION COSTS — PHYSICAL AND DOLLAR ESTIMATES — CALIFORNIA.

	Tulare County[1]		Sacramento & San Joaquin Valley[2]	
	1967		1970	
Activities	Physical Units	Dollar Estimates	Physical Units	Dollar Estimates
PRE-HARVEST CASH CROPS				
Pruning	108 trees @ 90¢	$ 97.20	109 trees @ $.90/tree	$ 99.50
Brush Disposal	4M hrs., contract $5	11.40	2 hrs.	7.20
Cover Crop Seed	1 hr. M & T Seed	5.10	—	—
Fertilize	$^1/_2$ hrs. M & T	1.55	—	—
Fertilize Material	$1^1/_2$ lb. N/tree @ 11¢/lb.	17.82	1.50 — 150N @ 12¢	19.50
Spray and Dust Applications	Contract	25.00	5X (2M)	85.01
Spray and Dust Material	—	37.00	—	—
Cultivation	10 hrs. M & T	31.00	4X, 4 hrs.	15.00
Irrigation	8X, 8M hrs.	12.80	6X, 12 hrs.	22.80
Water	Power, $22, dist. tax $6	28.00	Power	9.75
Thinning	1.60/tree	172.80	1.60/tree	174.40
Prop and Tie	9M & 2T hr.	17.40	4 hrs	9.85
Ridging	—	—	4X, 8 hrs.	2.96
Remove Ridge	—	—	4 hrs.	1.48
Marketing Order	—	—	—	—
Misc. Labor	8M & 2T hr.	15.80	3 hrs.	5.70
Misc. Material	—	9.00	—	1.50
County Taxes	—	35.00	—	—

TABLE 12. (continued)

Activities	Tulare County[1] 1967 Physical Units	Tulare County[1] 1967 Dollar Estimates	Sacramento & San Joaquin Valley[2] 1970 Physical Units	Sacramento & San Joaquin Valley[2] 1970 Dollar Estimates
Office, car, interest on operating capital	–	38.00	–	–
Repairs except tractor	–	9.00	–	–
Total Pre-Harvest Per Acre	–	563.87	–	454.65
Total Per Ton	–	37.59	–	28.42
HARVESTING				
Picking and Hauling	$15/ton	225.00	$17^2/_3$ tons @ $14/ton	247.33
Misc. Harvest	6M & 2T hrs.	12.60	–	–
Total Harvest Cost per Acre	–	237.60	–	247.33
Total Harvest Cost	–	15.84	–	15.46

Merced, San Joaquin & Stanislaus Counties[3] 1969 Physical Units	Merced, San Joaquin & Stanislaus Counties[3] 1969 Dollar Estimates	Fresno County[4] 1965 Physical Units	Fresno County[4] 1965 Dollar Estimates	Merced County[5] 1971 Physical Units	Merced County[5] 1971 Dollar Estimates
108 trees @ $1/tree	$ 114.75	108 trees @ 75¢	$ 81.00	108 trees @ 75¢	$ 81.00
2 hrs.	11.98	3 hrs.	9.00	2M & 1T hr.	5.60
Spray or hoe weeds	5.40	Plant barley	3.83	–	–
(Application and		$^1/_2$ hr. M & T	1.43	2X, 3M hrs. 1T hr.	7.50
Material)	27.00	120 lbs. N @ 15¢	18.00	130 lbs. N @ 12¢	15.60
5X, 2 hrs.	21.08	3X, 2¢	30.00	3.5X, 2¢/gal.	24.50
–	75.00	–	39.60	1225 gallons	49.50
4X, 2 hrs.	14.34	$7^1/_2$ M & T	21.38	6 hrs. M & T	22.20
6X, 2.5 hrs.	12.00	7X, 13 hrs.	19.50	6X, 9M hrs.	17.10
Water	8.00	3.5 ft. water & power	14.00	Water & tax	5.20
1.40/tree	153.05	108 trees @ $1.10	118.80	1.20/tree	129.60
3 hrs.	17.42	6 hrs.	13.00	6M & 2T hrs.	15.00
Ridge & Romouc/1 hr.		$1^1/_2$ hrs. M & T, 3X	4.28	–	–
6X	5.79	–	–	–	–
2.25 per ton	36.00	–	–	–	–
4 hrs. plus costs	13.47	4 hrs.	9.50	4M hrs. 1T hr.	9.40
Replant	1.25	1 T		–	5.00
–	35.00	–	24.00	–	31.00
–	49.39	–	37.60	–	40.42
–	–	–	6.50	–	9.00
–	600.92	–	451.42	–	467.62
–	37.56	–	30.09	–	27.51
$17^2/_3$ tons @ $14/ton	249.41	15 tons @ $12.00	180.00	$14.50/ton	246.50
–	–	4M hrs. 1T hr.	33.60	–	–
–	249.41	–	213.60	–	246.50
–	15.59	–	14.24	–	14.50

Activities	Tulare County[1] 1967 Physical Units	Tulare County[1] 1967 Dollar Estimates	Sacramento & San Joaquin Valley[2] 1970 Physical Units	Sacramento & San Joaquin Valley[2] 1970 Dollar Estimates
DEPRECIATION COSTS				
Trees:	$1,000 – 20 yr. life	$ 50.00	1200/acre – 20 yr. life	$ 85.71
Irrigation facilities:	$200	12.00	110	5.50
Buildings:	$40	2.00	75	3.00
Tractor:	175 @ 75¢	13.13	(All equipment)	–
Other equipment	$220	22.00	288	28.81
Total Depreciation Cost per Acre	–	99.13	–	123.02
Total Depreciation Cost per Ton	–	6.61	–	7.69

TABLE 12. (continued)

Activities	Tulare County[1] 1967 Physical Units	Tulare County[1] 1967 Dollar Estimates	Sacramento & San Joaquin Valley[2] 1970 Physical Units	Sacramento & San Joaquin Valley[2] 1970 Dollar Estimates
INTEREST ON INVESTMENT	at 6%			
Trees:	on 1/2 cost (500)	30.00	1200	42.00
Irrigation facilities:	on 1/2 cost (100)	6.00	110	3.85
Buildings:	on 1/2 cost (20)	1.20	75	2.63
Tractor:	17 1/2 hrs. @ 30¢	5.25	–	–
Other equipment	1/2 cost (110)	6.60	298	10.12
Land	$1,000	60.00	1200	84.00
Total Interest on Investment per Acre	–	109.05	–	142.60
Total Interest on Investment per Ton	–	7.27	–	8.91
TOTAL COST OF PRODUCTION PER ACRE–		$1,009.65	–	$1,150,23
TOTAL COST OF PRODUCTION PER TON–		$ 67.31	–	$ 71.89

Merced, San Joaquin & Stanislaus Counties[3] 1969 Physical Units	Merced, San Joaquin & Stanislaus Counties[3] 1969 Dollar Estimates	Fresho County[4] 1965 Physical Units	Fresho County[4] 1965 Dollar Estimates	Merced County[5] 1971 Physical Units	Merced County[5] 1971 Dollar Estimates
–	$ 69.60	$1040 – 20 yr. life	$ 52.00	$1280 – 20 yr. life	$ 64.00
–	–	$240 cost – 25 yr. life	9.60	$100 – 25 yr. life	4.00
–	–	$120 cost – 15 yr. life	8.00	$100 – 15 yrs.	6.67
–	–	12 hrs. @ 50¢	6.00	11 hrs. @ $1.28	14.08
–	–	–	–	–	–
–	69.60	–	75.60	–	88.75
–	4.35	–	5.04	–	5.22
–	–	1/2 cost $520	31.20	1/2 cost $640	44.80
–	–	1/2 cost $120	7.20	1/2 cost $50	3.50
–	–	1/2 cost $60	3.60	–	3.50
–	–	12 hrs. @ 24¢	2.88	11 hrs. @ 58¢	6.38
–	–	–	–	Included in Buildings	–
–	–	$900	54.00	$1000	70.00
–	164.36	–	98.88	–	128.18
–	10.27	–	6.59	–	7.54
–	$1,144.29	–	$839.50	–	$931.05
–	$ 71.52	–	$ 55.96	–	$ 54.77

SOURCES:

[1] "Cost Analysis Work Sheet" – Sample Costs to Produce Clingstone Peaches in Tulare County – 1967, Based on a Yield of 15 tons (Marketable #1) per Acre. This source used man labor at $1.60 and $1.80 per hour, 40 H.P. gas wheel tractor per hour cash cost $1.30, depreciation $75, interest $.30.

[2] "Cost to Produce Cling Peaches" – Sacramento and San Joaquin Valley Areas, 1970, California, U.S.A.

[3] "Canning Peach Production" – Sample Costs to Produce Canning Peaches on the East Side (Cortez to Escalon) of Merced, San Joaquin and Stanislaus Counties, California. This source was based on an 80-acre orchard yielding 16 ton yield (No. 1 fruit) per acre, labor at $1.90 and $2.40 per hour, which includes Social Security, Workman's Compensation Insurance and all benefits furnished by the grower. Published by the University of California, Agricultural Extension Service.

[4] "Halford Peaches For Canning" (A slingstone variety maturing in late August) Cost Analysis Work Sheet by Marvin H. Gerdts and E.A. Yeary, California, 1965. This source used sample costs to produce Halford peaches in Fresho County for canning. Costs are for a mature orchard containing 108 trees per planted acre, producing 15 tons of fruit for canning used. Man labor $1.50 per hour total, and equipment operator $1.70. Medium wheel tractor per hour cash costs $1.15, depreciation 50¢ and interest 24¢.

[5] "Fay Elberta Peaches", Cost Analysis Work Sheet – 1971. Sample Costs to Produce Fay Elberta Peaches in Merced County, California, for Canning. This source used a yield of 17 tons per acre. Man labor $1.90 per hour and equipment operator $2.15; medium wheel tractor per hour cash costs $1.55, depreciation $1.28, and interest 58¢.

TABLE 13. COST OF PROCESSING PEACHES. RANGE PER CASE OF 24X 14 OZ.

	Low	High
Raw Product	1.57	2.42
Direct Labour	.83	1.34
Sugar	.34	.39
Cans – Cases – Lables	1.27	1.38
Direct Expense	.02	.10
Marketing Costs	.44	.92
Indirect – Factory Overhead	.31	.80
Indirect – Administration Overhead	.53	.75

SOURCE: Canada Department of Industry Trade and Commerce.

TABLE 14. GROWER PRICE RECEIVED FOR PROCESSING PEACHES IN ONTARIO. 1956-1970.

	Dollars Per Ton				
Year	Price	Year	Price	Year	Price
1956	104.10	1962	104.00	1968	136.80
1957	102.30	1963	104.00	1969	135.60
1958	76.70	1964	110.00	1970	134.50
1959	93.00	1965	126.00	1971	140.50
1960	106.10	1966	124.00		
1961	95.10	1967	144.00		

SOURCE: Ontario Ministry of Agriculture and Food – "Agricultural Statistics for Ontario".

TABLE 15. CALIFORNIA PEACH PRICES 1954-67.

Year	Freestone		Clingstone	
	Grower Return	Price[1]	Grower Return	Price[1]
	$/ton	$/ton	$/ton	$/ton
1954	62.60	–	54.70	–
1955	75.30	–	80.50	–
	70.20	–	70.90	–
	61.50	–	64.10	–
	59.10	–	65.00	–
	50.70	–	58.80	–
	50.90	–	55.90	–
	51.80	–	67.50	–
1962	52.60	–	64.00	–
	55.70	62.00	57.20	71.70
	61.70	68.00	61.50	75.90
	51.70	59.50	68.00	83.70
	74.50	81.60	67.80	84.00
1967	92.40	99.80	82.20	97.60
1968	92.70	102.40	75.20	92.40
1969	76.60	84.80	73.40	92.80
1970	79.40	88.60	80.60	98.60
1971	86.20	93.40	78.62[a]	95.40[a]

[1]Price: This newer concept, first introduced in 1963, computes price and value for "processing" utilization on basis of equivalent returns at the processing plant door. This change results in a higher price and value series for processing, or dual processing – fresh market crops.

[a]Includes $4.39 which was withheld to compensate growers for about 58,000 tons of unsold and unharvested fruit.

SOURCE: California Fruits And Nut Statistics – California Crop and Livestock Reporting Service.

TABLE 16. FRESH PEACH UNLOADS IN MAJOR CANADIAN CITIES RECEIVED FROM BRITISH COLUMBIA, ONTARIO AND FOREIGN SOURCES. (Carlot Equivalents)

Year	Montreal			Toronto			Winnipeg			Vancouver		
	B.C.	Ont.	Imports	B.C.	Ont.	Imports	B.C.	Ont.	Imports	B.C.	Ont.	Imports
1955	2	484	88	1	370	24	60	30	49	98	–	77
1956	–	190	347	–	295	153	33	32	70	67	–	110
1957	7	433	318	–	358	171	62	19	48	99	–	44
1958	–	354	402	–	394	325	58	46	33	87	–	94
1959	7	166	496	5	252	336	54	49	47	89	–	66
1960	2	104	524	4	264	305	41	36	53	113	–	61
1961	1	117	463	–	364	326	48	63	57	83	–	68
1962	4	170	469	6	155	291	58	44	42	95	–	58
1963	–	163	504	–	254	293	30	51	32	54	–	45
1964	1	225	322	1	249	226	59	46	39	71	–	44
1965	–	112	373	–	183	292	–	36	79	–	–	124
1966	–	159	359	–	205	359	32	28	61	51	–	63
1967	–	196	292	–	124	332	45	8	35	67	–	43
1968	–	196	451	–	191	603	30	23	53	48	–	79
1969	–	190	393	–	201	455	–	24	74	–	–	118
1970	–	227	356	–	215	345	26	23	62	50	–	88
1971	–	231	421	–	221	384	29	32	71	82	–	80

SOURCE: Statistics Canada

TABLE 17. FRESH PEACH UNLOADS IN SELECTED CANADIAN CITIES RECEIVED FROM BRITISH COLUMBIA AND ONTARIO. (Carlot Equivalents)

Year	Halifax		Saint John		Quebec City		Ottawa		Regina		Saskatoon		Edmonton		Calgary	
	Ont.	B.C.	Ont.	B.C.	Ont.	B.C.	Ont.	B.C.	Ont.	B.C.	Ont.	B.C.	Ont.	B.C.	Ont.	B.C.
1955	17	—	15	—	88	—	124	1	3	22	5	23	—	45	—	54
1956	12	—	11	—	50	—	44	—	6	14	6	15	1	25	1	27
1957	19	—	22	—	57	—	89	—	11	39	10	23	—	64	—	54
1958	20	—	30	—	72	—	88	—	8	28	10	31	—	58	—	61
1959	24	—	18	—	26	—	74	2	7	19	16	28	—	64	—	42
1960	21	—	23	—	44	—	60	—	2	21	18	27	—	61	1	45
1961	30	—	17	—	43	—	112	—	5	22	22	26	6	70	5	41
1962	18	—	18	—	40	—	67	—	4	31	16	38	5	90	—	45
1963	31	—	11	—	62	—	91	—	6	25	16	31	5	66	6	29
1964	30	—	13	—	63	—	129	—	4	30	2	39	1	70	1	42
1965	22	—	13	—	37	—	120	—	1	—	14	—	12	1	8	—
1966	17	—	10	—	45	—	69	—	4	21	4	23	1	49	2	22
1967	15	—	7	—	58	—	58	—	1	30	—	24	—	62	—	30
1968	19	—	6	—	73	—	63	—	4	20	8	19	—	49	1	38
1969	13	—	10	—	89	—	72	—	2	—	11	—	4	—	3	—
1970	17	—	8	—	77	—	96	—	1	17	4	16	1	32	—	26
1971	31	—	10	—	82	—	96	—	1	15	3	25	—	68	—	21

SOURCE: Statistics Canada.

TABLE 18. CANADIAN PEACH CONSUMPTION AND PRODUCTION

Year	Apparent Fresh Disappearance		Apparent Canned Disappearance[1]		Total Disappearance	Total Production	Disappearance Minus Production
					000's of lbs		
1946	79,950		38,080		118,030	107,250	10,780
1947	77,450		43,024		120,474	84,050	36,424
1948	46,650		41,136		87,786	88,000	− 214
1949	42,800		48,823		91,623	100,550	−8,927
1950	35,450		49,644		85,094	61,100	23,994
1951	49,650)		50,538)		100,188	89,600	10,588
1952	117,750)		52,012)		169,762	145,850	23,912
1953	113,150)	88,690	60,362)	56,981	173,512	144,650	28,862
1954	84,650)		57,701)		142,351	121,250	21,101
1955	78,250)		64,292)		142,542	144,150	−1,608
1956	84,100)		63,484)		147,584	83,350	64,234
1957	88,150)		66,662)		154,812	140,050	14,762
1958	116,700)	99,580	75,416)	69,514	192,116	152,150	39,966
1959	106,500)		69,439)		175,939	132,250	43,689
1960	102,450)		72,571)		175,021	118,100	56,921
1961	115,900)		78,320)		194,220	153,750	40,470
1962	86,750)		73,586)		160,336	116,800	43,536
1963	98,900)	97,270	72,451)	77,157	171,351	118,650	52,701
1964	99,700)		85,627)		185,327	143,100	42,227
1965	85,100)		75,802)		160,902	80,300	80,602
1966	97,692)		83,208)		180,900	104,250	76,650
1967	81,703)		79,590)		161,293	82,300	78,993
1968	101,282)	99,272	79,920)	76,463	181,202	95,800	85,402
1969	103,064)		72,184)		175,248	83,000	92,248
1970	112,618)		67,414)		180,032	110,400	69,632

[1] At actual weight.

SOURCE: Statistics Canada

TABLE 19. TARIFF RATES AND MARKET SHARE COMPARISONS SELECTED: CANNED TENDER FRUIT ENTERING CANADA FROM THE U.S., AUSTRALIA AND SOUTH AFRICA.

Item	United States	Autralia	South Africa[1]
Apricots			
tariff rate (cents/lb)	2.5	0.5	1.0
share of market 1960	47.0	10.0	42.0
share of market 1969	13.0	25.0	52.0
share of market 1971	13.0	28.0	53.0
Fruit Cocktail[a]			
tariff rate (cents/lb)	2.0	1.0	–
share of market 1960	98.0	2.0	–
share of market 1969	85.0	13.0	–
share of market 1971	81.0	17.0	–
Peaches			
tariff rate (cents/lb)	2.25	0.25	–
share of market 1960	99.0	1.0	–
share of market 1969	73.0	26.0	–
share of market 1971	75.0	15.0	10.0
Pears			
tariff rate (cents/lb)	2.0	0.0	–
share of market 1960	95.0	5.0	–
share of market 1969	27.0	70.0	–
share of market 1971	17.0	77.0	4.0

[1] Imports of fruit cocktail, peaches and pears from South Africa were insignificant.

[a] 1971 values are for mixed fruit.

SOURCES: "Canadian Imports of Horticultural Products". FASM – 226, U.S. Department of Agriculture, Foreign Agricultural Service, February, 1971.
and;
"Imports by Commodities", Trade of Canada Catalogue No. 65-007, Statistics Canada, December, 1971.

TABLE 20. CANADIAN TARIFF RATES ON TENDER FRUIT.

Commodity	Unit	British Differential	Special Agreement	MFN	U.S.A. MFN
Peaches – Fresh	lb.	Free	–	$1\frac{1}{2}$¢, 14 wks. max., otherwise 10%	$\frac{1}{2}$¢ Dec. 1 – May 31 $\frac{1}{2}$¢ June 1 – Nov. 30
Peaches – Canned	lb.	$1\frac{1}{2}$¢	$\frac{1}{4}$¢ (Aust.)	$2\frac{1}{4}$¢	20% ad val.
Peaches – Frozen	lb.	2¢	–	$2\frac{1}{2}$¢ (G.T. 3¢)	–
Pears – Fresh	lb.	Free	–	1¢, 22 wks. max., otherwise 10% Free – Mar., Apr., May and June	$\frac{1}{2}$¢
Pears – Canned	lb.	2¢	Free (Aust.) 1¢ (n.Z.)	2¢ (G.T. 5¢)	20% ad val.
Apricots – Fresh	lb.	Free	–	$1\frac{1}{2}$¢, 10 wks. max., otherwise 10%	$\frac{1}{2}$¢
Apricots – Canned	lb.	2¢	$\frac{1}{2}$¢ (Aust. & S.Afr.) $1\frac{1}{2}$¢ (N.Z.)	$2\frac{1}{2}$¢	35% ad val.

TABLE 20. (continued)

Commodity	Unit	British Differential	Special Agreement	MFN	U.S.A. MFN
Cherries — Fresh	lb.	Free	—	2¢, 7 wk. max., otherwise 10%	$^1/_2$¢
Cherries — Canned	lb.	Free	$^1/_2$¢ (Aust.) $1^1/_2$¢ (N.Z.)	$1^1/_2$¢	—
Cherries — Frozen	lb.	$2^1/_2$¢	—	3¢	—
Plums — Fresh	lb.	Free	—	1¢, 10 wks. max., otherwise 10% Free — May and June	$^1/_4$¢ Feb. 1 — May 31 $^1/_2$¢ June 1 — Jan. 31
Plums — Processed Canned Fruit, N.O.P.	lb.	1¢	Free (Aust.) 1¢ (N.Z.)	1¢ (G.T. 5¢)	35% or $17^1/_2$¢ ad val. if mixed.

SOURCE: Statistics Canada

TABLE 21. CANADIAN PEAR PRODUCTION, IMPORTS, EXPORTS, PACK, STOCKS, PRICES AND FARM VALUE 1946-71.

Year	Production	Import Fresh	Export[1] Fresh	Import Canned	Export[1] Canned	Domestic[2] Pack	Stocks[3] Canned
				000's of lbs.			
1946	47,550	19,484	227	a	734	13,946	3,018
1947	48,300	21,358	220	1,385	1,477	23,804	1,318
1948	39,450	n.a.	118	587	353	13,209	7,507
1949	52,900	n.a.	247	1,371	84	24,637	3,114
1950	43,200	17,894	153	1,753	576	29,076	7,601
1951	61,250	8,936	3,982	2,629	78	22,247	14,689
1952	65,150	19,165	2,117	1,128	60	13,332	25,356
1953	71,750	17,393	3,552	1,381	53	23,065	9,434
1954	63,050	22,967	2,863	2,454	1,054	31,147	6,992
1955	75,500	19,758	3,660	3,658	886	36,380	12,850
1956	70,000	23,546	1,032	2,998	1,050	34,832	19,013
1957	54,700	27,997	946	4,668	847	25,787	19,810
1958	76,050	23,117	736	4,770	1,377	26,080	11,843
1959	63,800	34,702	497	5,573	2,427	32,125	6,677[b]
1960	78,700	26,802	1,887	5,570	559	34,768	9,822[b]
1961	73,850	24,843	2,680	5,262	1,975	30,804	17,647[b]
1962	86,000	27,359	1,495	5,613	7,304	35,649	11,836[b]
1963	84,400	15,050	9,506	7,076	1,842	28,655	8,787[b]
1964	99,950	25,001	10,277	10,015	831	37,379	7,951[b]
1965	53,250	29,816	1,786	11,384	247	27,277	11,485[b]
1966	103,100	36,043	4,776	12,897	344	38,503	10,878[b]
1967	87,650	18,526	10,004	10,158	1,663	25,712	18,456[b]
1968	82,850	29,607	4,322	9,976	1,581	33,420	10,646[b]
1969	50,950	53,694	2,115	7,726	272	26,687	13,266[b]
1970	82,950	34,721	4,494	10,646	127	29,260	10,108[b]
1971	90,650	36,398	3,425	10,923	30	29,417	10,196[b]

TABLE 21. (continued)

Year	Supply of Canned Fruit 000's lbs	Sales for Processing 000's lbs	Average Price $/ton	Total Farm Value 000's $	Stocks As % of Domestic Pack	Sales For Processing As % of Production	Domestic Pack As % of Production	Fresh Imports As % of Production	Canned Imports As % of Production
1946	16,964	–	81	2,278	21.64	–	29.33	40.98	0.00
1947	25,122	21,800	76	2,178	5.54	45.1	49.28	44.22	2.87
1948	20,716	14,350	90	1,784	56.83	36.4	33.48	–	1.49
1949	27,751	29,100	78	2,056	12.64	55.0	46.57	–	2.59
1950	36,677	26,000	87	1,877	26.14	60.2	67.31	41.42	4.06
1951	36,936	25,600	73	2,238	66.03	41.8	36.32	14.59	4.29
1952	38,688	15,950	73	2,371	190.19	24.5	20.46	29.42	1.73
1953	32,499	25,600	74	2,653	40.90	35.7	32.15	24.24	1.92
1954	38,139	30,850	71	2,246	22.45	48.9	49.40	36.43	3.89
1955	49,230	39,850	68	2,579	35.32	57.8	48.19	26.17	4.85
1956	53,845	37,100	82	2,853	54.58	53.0	49.76	33.64	4.28
1957	45,597	27,050	80	2,201	76.82	49.5	47.14	51.18	8.53
1958	37,923	30,650	78	2,986	45.41	40.3	34.29	30.40	6.27
1959	38,802	38,950	71	2,345	20.78	61.1	50.35	54.39	8.74
1960	44,590	46,350	85	3,344	28.25	58.9	44.18	34.06	7.08
1961	48,451	37,250	84	3,101	57.29	50.4	41.71	33.64	7.12
1962	47,485	46,900	81	3,471	33.20	54.5	41.45	31.85	6.53
1963	37,442	37,750	95	3,999	30.66	44.7	33.95	17.83	8.38
1964	45,330	52,200	79	3,942	21.27	52.2	37.40	25.01	10.02
1965	38,762	35,567	100	2,661	42.11	65.2	51.22	55.99	21.38
1966	49,381	49,682	82	4,240	28.25	48.2	37.35	34.96	12.51
1967	44,168	34,238	110	4,814	71.78	39.1	29.33	21.14	11.59
1968	44,066	43,493	122	5,065	31.86	52.5	40.34	35.74	12.04
1969	39,953	29,194	130	3,312	49.71	57.3	76.14	153.19	15.16
P1970	39,368	42,296	126	5,241	34.55	50.7	33.29	39.50	12.11
1971	39,613	44,914	108	4,902	34.66	49.5	32.45	40.15	12.05

P – Preliminary.

[1] These are cumulative figures arrived at through monthly totals. However, some totals for some months are not available resulting in smaller figures.

[2] Weight includes cartons and containers.

[3] As of June 30 of the year.

[a] Too small an amount to be expressed.

n.a. – not available

SOURCE:
- Production : Statistics Canada – Handbook of Agricultural Statistics.
- Fresh Import : Statistics Canada)
- Fresh Export :) Trade of Canada
- Canned Import :) Imports/Exports by Commodities.
- Canned Export :)
- Domestic Pack : Statistics Canada
- Prices : Statistics Canada – Handbook of Agricultural Statistics.
- Stocks Canned : Statistics Canada

TABLE 22. REGIONAL PEAR PRODUCTION, VALUE AND PRICES

Year	Ontario			British Columbia			Nova Scotia		
	Production	T.F.V[1]	Price Paid to Producer[2]	Production	T.F.V.[1]	Price Paid to Producer[2]	Production	T.F.V.[1]	Price Paid to Producer[2]
	000's lbs.	000's $	$/ton	000's lbs.	000's $	$/ton	000's lbs.	000's $	$/ton
1946	13,450	467	69.60	32,600	1,766	108.40	1,500	45	60.00
1947	19,650	638	64.80	27,150	1,497	110.40	1,500	43	56.80
1948	10,950	386	70.40	27,400	1,364	99.60	1,100	34	62.00
1949	25,200	851	67.60	26,950	1,174	87.20	750	30	80.00
1950	24,150	970	80.40	17,850	859	96.40	1,200	48	80.00
1951	28,150	953	67.60	31,200	1,209	77.60	1,900	76	80.00
1952	36,900	1,243	67.20	25,450	1,030	80.80	2,800	98	70.00
1953	37,700	1,304	69.20	32,450	1,285	79.20	1,600	64	80.00
1954	33,200	1,174	70.80	27,850	996	71.60	2,000	76	76.00
1955	44,350	1,396	62.80	29,050	1,101	76.00	2,100	82	78.00
1956	40,950	1,526	74.40	26,800	1,244	92.80	2,250	83	74.00
1957	19,000	730	76.80	34,550	1,430	82.80	1,150	41	72.00
1958	43,250	1,433	66.40	31,200	1,497	96.00	1,600	56	70.00
1959	38,350	1,263	61.60	23,700	1,029	86.80	1,750	53	72.00
1960	44,850	1,750	78.00	32,450	1,545	95.20	1,400	49	70.00
1961	40,800	1,495	73.20	30,500	1,508	98.80	2,550	98	76.80
1962	53,450	1,905	71.20	30,150	1,490	98.80	2,400	76	63.20
1963	36,550	1,604	87.60	44,650	2,290	102.40	3,200	105	65.60
1964	55,100	2,245	81.60	42,750	1,613	75.60	2,100	84	80.00
1965	44,350	2,035	91.60	6,500	518	159.20	2,400	108	90.00
1966	55,650	2,383	85.60	43,350	1,738	80.00	4,100	119	58.00
1967	44,750	2,126	95.20	39,450	2,574	130.40	3,450	114	66.00
1968	35,250[m]	2,229	126.00	44,950	2,723	122.00	2,650	113	86.00
1969	39,800[m]	2,603	130.00	7,900	572	144.00	3,250	137	84.00
1970	42,400[m]	2,642	124.00	37,700	2,472	132.00	2,850	127	90.00
1971	50,800	3,061	120.00	36,600	1,716	94.00	3,250	125	76.00

[1] T.F.V. = Total Farm Production

[2] Weighted average of fresh and processing sales

p – Preliminary

m – marketed production only

SOURCE: Crop and Seasonal Price Summaries, C.D.A.

TABLE 23. PEAR TREE COUNT IN ONTARIO, 1956, 1961, 1966 AND 1971 SURVEYS.

Variety	1956 Survey	1961 Survey	1966 Survey	1971 Survey	1971 as a % of 1966
	No. trees	No. trees	No. trees	No. trees	Percent
Gifford	a	a	2,096	a	–
Clapp Favorite	16,630	19,050	21,404	21,721	101.48
French Bartlett	a	a	3,872	a	–
Bartlett	327,810	350,719	358,040	318,874	89.06
Anjou	11,330	12,204	11,989	11,241	93.76
Bosc	21,170	31,645	53,547	58,649	109.53
Kieffer	234,670	206,276	150,646	98,323	65.23
Other Varieties	12,847	11,847	9,469	16,479	174.03
TOTAL	624,230	631,741	611,063	525,287	85.96

[a] Included in Other Varieties

SOURCE: 1971 Fruit Tree Census Part II, Tender Fruits, Ontario Ministry of Agriculture and Food.

TABLE 24. COST OF PRODUCING PEARS IN MICHIGAN AND BRITISH COLUMBIA. PHYSICAL AND DOLLAR ESTIMATES.

	Michigan[1] 1969		Summerland[2] 1972	
	PHYSICAL	DOLLAR	PHYSICAL	DOLLAR
CULTURAL COSTS:				
Prune	66 hrs	170.28	71 hrs	161.74
Brush Shredding	3 hrs	6.14		
Spray (6 applications)	4 hrs	90.59	10 hrs	92.80
Dust				
Blight Cutting		15.00		
Thinning			80 hrs	180.00
Fertilizer	1 hr	14.65		17.53
Chop Cover Crops	1 hr	3.43		
Weed Control	5 hrs	3.81		7.62
Irrigation			9x = 10 hrs	41.04
Miscellaneous		10.41	Mowing	15.52
Tree Replacement				
Cultivation				
Heating				
Total Cultural Cost/Acre		314.31		516.25
Total Cultural Costs/Ton		62.86		51.63
HARVEST COSTS:				
Picking	33.6¢/bus.	67.20		100.00
Hauling				34.12
Supervision	$2.24/hr	19.83		
Total Harvest Costs/Acre		87.03		134.12
Total Harvest Costs/Ton		17.41		13.41
CASH OVERHEAD:				
Misc. office etc.				32.52
Taxes		7.00		28.70
Ins., Licenses				
Total Cash Overhead/Acre		7.00		61.22
Total Cash Overhead/Ton		1.40		6.12
Management/Acre			5% of gross income	50.00
Management/ton				5.00
INVESTMENT COST:				
Land	7% of $800		$3,000	240.00
Trees		56.00		
Irrigation Equip.			$ 150	6.00
Buildings			$ 100	4.00

TABLE 24. COST OF PRODUCING PEARS IN MICHIGAN AND BRITISH COLUMBIA. PHYSICAL AND DOLLAR ESTIMATES. (cont'd)

	Michigan[1] 1969 PHYSICAL	DOLLAR	Summerland[2] 1972 PHYSICAL	DOLLAR
Equipment			$ 840	39.60
Total Investment Cost/Acre		56.00		289.60
Total Investment Cost/Ton		11.20		28.96
DEPRECIATION:				
Irrigation Equip.	$800/acre	40.00		7.50
Buildings				2.50
Equipment				79.08
Total Depreciation Cost/Acre		40.00		89.08
Total Depreciation Cost/Ton		8.00		8.91
Total Cost/acre		504.34		$1,140.27
Total Cost/Ton		100.87		114.03

SOURCE: [1] "Economics of Pear Production in Western Michigan", S. Harsh et. al. Agricultural Economics Report No. 124, Department of Agricultural Economics, Michigan State University, East Lansing Michigan. – used a yield of 5 tons per acre.

[2] Sample Cost to Produce Bartlett Pears – Summerland 1972. Expected Yield: 10 tons/acre; labour rate per hour: skilled $2.25, unskilled, $1.75.

TABLE 25. GROWER PRICE RECEIVED FOR PROCESSING BARTLETT PEARS IN ONTARIO.

Year	$/Ton
1956	108.72
1957	115.72
1958	97.84
1959	103.53
1960	114.32
1961	107.23
1962	105.89
1963	113.85
1964	105.45
1965	128.43
1966	111.42
1967	138.57
1968	148.97
1969	136.85
1970	149.39
1971	

SOURCE: Agricultural Statistics for Ontario, Ontario Ministry of Agriculture and Food.

TABLE 26. UNLOADS OF FRESH CANADIAN PEARS IN SELECTED MARKETS BY CARLOT EQUIVALENTS.

	Halifax		Saint John		Quebec City		Ottawa		Regina		Saskatoon		Edmonton		Calgary	
Year	Ont.	B.C.	Ont.	B.C.	Ont.	B.C.	Ont.	B.C.	Ont.	B.C.	Ont.	B.C.	Ont.	B.C.	Ont.	B.C.
1955	–	1	–	–	2	2	8	5	–	16	–	26	–	67	–	48
1956	–	–	–	–	13	5	7	5	–	19	–	23	–	76	–	51
1957	–	2	–	1	4	6	–	10	–	22	–	24	–	85	–	55
1958	–	2	–	–	16	2	15	9	–	26	1	29	–	91	–	52
1959	–	2	1	–	7	2	9	4	–	18	–	24	–	69	–	39
1960	–	–	–	–	6	7	6	6	–	19	–	22	–	87	–	43
1961	–	–	–	–	5	1	12	3	–	28	1	29	6	70	–	37
1962	–	–	1	–	7	0	13	4	–	28	1	27	5	90	–	41
1963	–	1	1	1	6	3	9	9	1	26	–	25	–	79	–	41
1964	–	2	–	1	27	1	18	1	–	29	–	27	–	85	–	31
1965	–	–	–	–	14	–	19	2	–	5	–	9	–	36	–	4
1966	–	–	1	–	13	2	9	3	–	20	–	23	–	77	–	33
1967	–	–	–	–	26	2	10	5	–	15	–	20	–	77	–	23
1968	–	–	–	2	15	6	6	9	–	18	–	22	–	71	–	34
1969	–	–	–	–	10	–	8	1	–	6	–	8	–	26	–	16
1970	–	–	–	–	10	–	11	12	–	16	–	20	–	62	–	29
1971	1	–	–	–	8	8	12	12	–	14	–	31	–	63	–	38

SOURCE: Annual Unload Report – Fresh Fruits and Vegetables – on 12 Canadian Markets, C.D.A.

TABLE 27. UNLOADS OF FRESH PEARS IN SELECTED MARKETS BY SOURCE BY CARLOT EQUIVALENTS

	Montreal			Toronto			Winnipeg			Vancouver		
Year	B.C.	Ont.	Imports	B.C.	Ont.	Imports	B.C.	Ont.	Imports	B.C.	Ont.	Imports
1955	52	27	195	44	79	74	74	3	108	59	–	31
1956	63	54	233	58	94	131	73	7	114	33	–	21
1957	85	6	279	139	33	221	97	–	28	61	–	20
1958	57	82	272	79	93	194	106	5	10	40	–	16
1959	38	37	360	42	52	245	67	3	37	37	–	20
1960	52	29	278	67	51	176	83	–	23	46	–	12
1961	34	38	319	49	97	153	84	2	24	68	–	19
1962	38	204	323	38	95	177	78	4	26	50	–	26
1963	97	69	178	108	52	136	72	1	11	57	–	9
1964	67	100	304	84	85	171	60	3	13	63	–	24
1965	26	31	244	18	42	265	14	2	21	18	–	31
1966	67	39	331	57	90	267	55	–	15	32	–	26
1967	89	76	214	132	35	113	50	–	6	50	–	14
1968	103	75	303	137	71	249	63	–	17	51	–	29
1969	27	46	444	32	44	282	22	–	41	18	–	57
1970	79	45	349	67	36	238	54	–	11	64	–	55
1971	104	42	321	51	77	255	72	–	32	70	–	52

SOURCE: Annual Unload Report – Fresh Fruits and Vegetables – On 12 Canadian Markets, C.D.A.

TABLE 28. CANADIAN APRICOT PRODUCTION, IMPORTS, PACK, STOCKS, PRICES AND FARM VALUE, 1946-71.

Year	Production	Fresh Imports	Canned Imports[1]	Domestic Pack[1]	Canned Stocks[2]	Average Price	Farm Value
	000's lbs.	000's lbs.	000's lbs.	000's lbs.	000's lbs.	$/Ton	000's $
1946	7,350	5,645[a]	c	3,327	219	93	–
1947	5,800	7,439[a]	c	4,418	368	72	–
1948	7,600	n.a.	c	2,660	734	126	–
1949	9,050	n.a.	c	2,353	551	135	–
1950	900	11,178[a]	c	4,929	676	171	77
1951	1,900	6,181[a]	c	4,594	2,083	122	116
1952	12,150	3,397[a]	c	4,669	2,485	56	342
1953	8,250	3,997[a]	c	4,776	1,821	103	425
1954	5,900	8,067[a]	4,691	7,174	1,125	99	293
1955	9,200	7,932[a]	5,480	8,425	2,670	69	316
1956	4,200	5,443[a]	5,419	5,181	3,641	92	194
1957	14,050	3,775[a]	6,966	7,903	3,716	74	523
1958	11,550	1,122[a]	4,324	2,270	3,985	77	443
1959	9,050	5,226[a]	6,941	5,879	1,210[b]	103	464
1960	15,250	2,203	5,522	5,134	1,893[b]	88	674
1961	13,250	2,435	5,098	5,067	1,313[b]	94	626
1962	15,500	2,542	5,647	6,559	979[b]	92	714
1963	4,950	3,952	6,276	5,349	1,629[b]	132	327
1964	19,350	3,392	6,449	8,127	1,339[b]	78	754
1965	100	6,701	8,372	4,648	2,597[b]	260	13
1966	13,950	3,968	7,266	8,128	1,402[b]	77	536
1967	6,600	1,792	7,507	2,476	2,594[b]	104	343
1968	7,200	1,627	9,160	3,912	663[b]	136	491
1969	100	6,185	8,004	5,190	835[b]	220	11
1970	7,596	3,172	7,335	3,265	1,582[b]	142	546
1971	6,630	2,982	8,997	3,051	1,556[b]	134	443

TABLE 28 (continued)

Year	Supply of Canned Fruit	Sales for Processing	Stocks as % of Domestic Pack	Sales for Processing as a % of Production	Domestic Pack as % of Production	Fresh Imports as % of Production	Canned Imports as % of Production
	000's lbs.	000's lbs.	Percent	Percent	Percent	Percent	Percent
1946	3,546	–	6.58	–	42.27	76.80	–
1947	4,786	1,450	8.33	25.00	76.17	128.26	–
1948	3,394	3,000	27.59	39.47	35.00	n.a.	–
1949	2,904	2,300	23.42	25.41	26.00	n.a.	–
1950	5,605	350	13.71	38.89	547.67	124.20	–
1951	6,677	750	45.34	39.47	241.79	325.32	–
1952	7,154	3,150	53.22	25.93	38.43	27.96	–
1953	6,597	2,850	38.13	34.55	57.89	48.45	–
1954	8,299	2,750	15.68	46.61	121.59	136.73	79.51
1955	11,095	4,500	31.69	48.91	91.58	86.22	59.57
1956	8,822	1,950	70.28	46.43	123.36	129.60	129.02
1957	11,619	5,750	47.02	40.93	56.25	26.87	49.50
1958	6,255	5,850	175.55	50.65	19.65	9.71	37.44
1959	7,089	4,150	20.58	45.86	64.96	57.75	76.70
1960	7,027	7,700	36.87	50.49	33.67	14.45	36.21
1961	6,380	3,600	25.91	27.17	38.24	18.38	38.48
1962	7,538	6,450	14.93	41.61	42.32	16.40	36.43
1963	6,978	1,200	30.45	24.24	108.06	79.84	126.79
1964	9,466	9,300	16.48	48.06	42.00	17.53	33.33
1965	7,245	–	55.87	–	4,648.00	6,701.00	8,372.00
1966	9,530	5,876	17.25	42.1	58.27	28.44	52.09
1967	5,067	1,574	104.77	23.8	37.52	27.15	113.74
1968	4,575	2,247	16.95	31.2	54.33	22.60	127.22
1969	6,025	–	21.34	–	1,153.33	1,374.44	8,004.00
1970	4,847	3,604	48.45	39.54	39.34	32.22	96.51
1971	4,607	2,630	51.00	39.67	46.02	44.98	135.70

[a] Values from 1946-1959 include Quinces.
[b] These figures exclude stocks held by warehouses and retail stores.
[c] combined with Canned Peach Imports in source.
[1] Net weight as reported by Crop and Seasonal Price Summaries.
[2] As of June 30 of the year.

n.a. – not available.

SOURCE: Production: Statistics Canada
Fresh Imports: Statistics Canada
Canned Imports: Statistics Canada
Domestic Packed: Statistics Canada
Prices: Statistics Canada
Canned Stocks: Statistics Canada
Trade of Canada – Imports by Commodities / Exports by Commodities

TABLE 29. APPARENT CANADIAN DOMESTIC DISAPPEARANCE OF CANNED APRICOTS, CHERRIES, PEACHES, PEARS AND PLUMS[1].

Year[2]	Apricots 000's lbs	Cherries 000's lbs	Peaches 000's lbs	Pears 000's lbs	Plums 000's lbs	Total 000's lbs	Per Capita lb per head
1946	3,178	5,019	38,080	14,530	23,331	84,138	6.84
1947	4,052	7,337	43,024	18,235	14,394	87,042	6.93
1948	2,843	7,329	41,136	18,018	10,806	80,132	6.25
1949	2,228	6,580	48,823	21,321	8,868	87,820	6.53
1950	3,522	6,828	49,644	23,199	9,167	92,360	6.74
1951	4,192	7,414	50,538	13,573	9,207	84,924	6.06
1952	5,333	8,093	52,012	30,412	9,548	105,398	7.29
1953	5,472	6,399	60,362	26,772	8,883	107,888	7.27
1954	10,207	7,523	57,701	26,784	9,451	111,666	7.30
1955	11,425	9,157	64,292	32,216	9,948	127,038	8.09
1956	11,355	7,735	63,484	35,950	11,780	130,304	8.10
1957	11,399	8,644	66,662	34,208	10,442	131,355	7.91
1958	9,046	8,693	75,416	32,891	9,843	135,889	7.95
1959	10,963	7,995	69,439	33,926	8,727	131,050	7.50
1960	10,437	7,689	72,571	30,410	7,374	128,481	7.19
1961	9,920	12,673	78,320	38,103	9,669	148,685	8.15
1962	9,776	9,340	73,586	37,233	8,546	138,481	7.45
1963	11,249	7,648	72,451	33,849	8,910	134,107	7.08
1964	12,445	9,045	85,627	45,500	8,715	161,332	8.36
1965	13,599	7,471	75,802	35,278	7,136	139,286	7.09
1966	12,466	7,478	83,208	41,444	8,378	152,974	7.64
1967	12,042	7,032	79,590	38,529	9,894	147,087	7.21
1968	10,707	5,423	79,920	39,869	7,850	143,769	6.93
1969	9,982	7,559	72,184	34,137	7,979	131,841	6.26
1970	11,111	6,417	67,414,	39,644	6,213	130,799	6.18

[1] At actual weight.

[2] For the years 1958-69, the only stocks accounted for are canners, no retail and broker stocks are included as they were prior to 1958. Crop year imports used for these values.

SOURCE: Statistics Canada. Published in Canadian Agricultural Outlook Conference.

TABLE 30. FRESH APRICOTS, CHERRIES, PEACHES, PEARS AND PLUMS AVAILABLE FOR FRESH CONSUMPTION. 1946-1970[1].

Year[2]	Apricots	Cherries[3]	Peaches	Pears	Plums	Total	Total Per Capital
	000 lbs	000 lbs	000 lbs	000 lbs	000 lbs	000 lb	lbs
1946	10,200	8,250	79,950	51,100	30,350	179,850	14.63
1947	11,800	8,500	77,450	46,300	35,900	179,950	14.33
1948	4,600	6,550	46,650	25,100	24,050	106,950	8.34
1949	6,750	12,650	42,800	30,950	33,700	126,850	9.43
1950	11,750	8,450	35,450	35,000	23,850	114,500	8.35
1951	7,350	5,850	49,650	40,250	33,500	136,600	9.75
1952	12,250	17,000	116,750	57,300	43,250	246,550	17.05
1953	9,400	14,250	113,150	60,450	42,150	239,400	16.13
1954	11,200	14,600	84,650	52,300	36,200	198,950	13.01
1955	12,650	23,450	78,250	52,950	42,650	209,950	13.37
1956	7,700	11,450	84,100	58,050	37,000	195,600	12.16
1957	12,050	15,250	88,150	59,700	34,250	209,400	13.61
1958	6,572	20,400	116,700	68,000	37,400	249,072	14.58
1959	9,476	15,150	106,500	57,850	43,150[a]	232,126	13.28
1960	8,403	10,250	102,450	57,550	34,150	212,803	11.91
1961	9,635	15,350	115,900	58,900	37,800	237,585	13.03
1962	9,492	16,800	86,750	63,850	31,550	208,440	11.22

TABLE 30. (continued)

Year[2]	Apricots	Cherries[3]	Peaches	Pears	Plums	Total	Total Per Capital
1963	4,902	17,200	98,900	54,200	43,400	218,602	11.55
1964	12,237	28,700[a]	99,700[a]	62,300[a]	44,200[a]	247,137	12.81
1965	3,579	13,250[a]	85,100	46,700	43,800	192,429	9.80
1966	8,079	17,150[a]	97,692	81,814	38,555[a]	243,290	12.16
1967	5,673	22,459	81,073[a]	64,272[a]	36,731[a]	210,208	10.30
1968	5,675	13,125[a]	10,128[a]	65,113	37,931[a]	223,126	10.76
1969	2,130	16,128	103,064	71,668	30,576	223,566	10.62
1970	6,197	14,067	112,618	70,881	46,263[a]	250,126	11.70

[1] Data reported in this table represents total supply plus imports minus exports.

[2] Starting with 1959, with a few exceptions, imports used for processing are removed from the quantity available for fresh consumption.

[3] May include some sour cherries.

[a] Includes imports used for processing.

SOURCE: Statistics Canada. Published in Canadian Agricultural Outlook Conference.

TABLE 31. CANADIAN PLUM[1] PRODUCTION, IMPORTS, PACK, STOCKS, PRICES AND TOTAL FARM VALUE, 1946-71.

Year	Production	Fresh Imports	Domestic Pack	Stocks "Canned"	Supply of Canned Fruit	Sales for Processing
	000's lbs.	000's lbs.	000's lbs.	000's lbs.	000's lbs.	100 lbs.
1946	40,550	14,019	23,886	2,205	26,091	—
1947	38,950	13,340	19,026	2,760	21,786	16,300
1948	33,550	n.a.	9,416	7,392	16,808	9,000
1949	41,350	260	4,744	6,002	10,746	7,750
1950	30,000	7,177	11,757	1,878	13,635	12,450
1951	34,600	9,546	10,781	4,468	15,249	9,600
1952	44,800	7,159	7,336	6,042	13,378	8,050
1953	37,450	13,108	7,883	3,830	11,713	7,800
1954	35,800	10,209	8,451	2,830	11,281	8,450
1955	40,750	15,700	15,376	1,830	17,206	11,600
1956	26,700	20,609	9,832	7,258	17,090	9,600
1957	28,300	13,674	8,165	5,310	13,475	7,350
1958	32,400	14,786	10,808	1,907	12,715	9,600
1959	31,000	18,973	7,085	2,872[a]	9,957	6,750
1960	23,350	17,258	7,137	1,230[a]	8,367	6,200
1961	28,900	18,888	11,936	993[a]	12,929	9,650
1962	24,350	15,353	8,268	3,260[a]	11,528	7,450
1963	35,000	16,784	9,673	2,982[a]	12,655	7,950
1964	33,400	19,227	7,575	3,745[a]	11,320	7,150
1965	25,250	25,282	5,846	2,605[a]	8,451	4,100
1966	29,550	19,096	11,987	1,315[a]	13,302	10,040
1967	23,550	20,391	9,040	4,924[a]	13,964	7,059
1968	18,150	25,892	6,188	4,070[a]	10,258	5,022
1969	14,950	22,378	8,509	2,408[a]	9,747	2,764
1970	19,800	30,183	5,820	2,938[a]	8,758	3,620
1971	22,100	27,088	6,317	2,545[a]	8,862	4,515

TABLE 31. (continued)

Year	Farm Value Average (Price)	Total Farm Value	Stocks as % of Domestic Pack	Domestic Pack as % of Production	Sales for Processing as % of Production	Fresh Imports as % of Canadian Production
	$/Ton	000's of $	percent	percent	percent	percent
1946	74	–	9.23	58.91	–	34.57
1947	59	–	14.51	48.85	41.8	34.25
1948	96	–	78.50	28.07	26.8	–
1949	46	–	126.52	11.47	18.7	0.63
1950	68	1,016	15.97	39.19	41.5	23.92
1951	50	865	41.44	31.16	27.7	27.59
1952	46	1,033	82.36	16.38	18.0	21.31
1953	67	1,252	48.59	21.05	20.8	35.00
1954	82	1,467	33.49	23.61	23.6	28.52
1955	52	1,068	11.90	37.73	28.5	38.53
1956	67	896	73.82	36.82	36.0	77.19
1957	67	946	65.03	28.85	26.0	48.32
1958	74	1,194	17.64	33.36	29.6	45.64
1959	66	1,024	40.54	22.85	21.8	61.20
1960	83	970	17.23	30.57	26.6	73.91
1961	87	1,257	8.32	41.30	33.4	65.36
1962	85	1,031	39.43	33.95	30.6	63.05
1963	82	1,434	30.83	27.64	22.7	47.95
1964	70	1,171	49.44	22.68	23.5	57.57
1965	96	1,209	44.56	23.15	16.2	100.13
1966	100	1,491	10.97	40.57	34.0	64.62
1967	116	1,364	54.47	38.39	30.0	86.59
1968	156	1,416	65.77	34.09	27.7	142.66
1969	166	1,238	28.30	56.92	18.5	149.69
1970	164	1,629	50.48	29.07	18.3	150.75
1971	142	1,576	40.29	28.58	20.4	120.39

[1] Include prunes and plums.
[2] Includes cartons and containers.

[a] Excludes warehouse and retail store stocks.

SOURCES: Production: Statistics Canada
Fresh Import: Statistics Canada)
Fresh Export:) Trade of Canada
Canned Import:) Imports/Exports by Commodities
Canned Export:)
Domestic Pack: Statistics Canada
Prices Average: Statistics Canada
Stocks Canned: Statistics Canada

TABLE 32. PLUM & PRUNE PRODUCTION COSTS IN WASHINGTON STATE AND BRITISH COLUMBIA.

	Yakima Valley[1] 1962-63		Oliver District[2] 1971	
	Physical	Dollar	Physical	Dollar
CULTURAL COSTS:				
Prune	25 hrs	31.25	36 hrs	65.16
Brush Disposal	2.8 hrs	3.97		
Cultivate	2X1.5 hrs	2.56	3X6 hrs	17.58
Spray	5 hrs	10.44	3X = 3 hrs	9.39
Spray Material		124.80		25.48
Fertilize	3.2 hrs	4.57	1 hr	1.92
Fertilize Material		76.10	400 lbs N	14.48
Irrigation	+Ditch			
	1 Acre	23.37		42.90
Replant (replacement)		2.75		
Smudging	2X	86.74		
Propping		2.81		
Mowing	2X	2.18	6X = 9 hrs	29.79
Misc	Including			
	Repairs	60.67		37.36
Total Cultural Costs/acre		432.21		244.06
Total Cultural Costs/ton		43.22		17.43
HARVESTING COSTS:				
Picking		140.00		266.00
Hauling		8.00		33.60
Supervision		7.50		
Misc.	cleanup	5.62		19.72
Total Harvest Cost/acre		161.12		319.32
Total Harvest Cost/ton		16.11		22.81
CASH OVERHEAD:				
Misc. office etc.		9.85	5% of cash	
			costs	28.16
Taxes		24.55		55.00
Insurance		13.30		
Total Cash Overhead/acre		47.70		83.16
Total Cash Overhead/ton		4.77		5.94
Management			5% of 1610	80.50
				5.75
INVESTMENT COST:			per acre	Interest @ 7%
Land	$1500 @ 6%	90.00	1200	84.00
Trees			1800	126.00
Irrigation System			150	5.25
Buildings	$173.70 @ 6%	10.42	200	7.00
Equipment	$370.60 @ 6%	22.24	713	25.00
Total Investment Cost/acre		122.66		247.25
Total Investment Cost/ton		12.27		17.66

TABLE 32. (continued)

	Yakima Valley[1] 1962-63		Oliver District[2] 1971	
	Physical	Dollar	Physical	Dollar
DEPRECIATION COST:				
Trees				
Irrigation System				7.50
Buildings		6.40		10.00
Equipment		30.73		74.00
Total Depreciation Cost/acre		37.13		91.50
Total Depreciation Cost/ton		3.71		6.54
Total Cost/acre		800.82		1065.79
Total Cost/ton		80.08		76.13

[1] Growers Estimates of Production Costs — Yakima Valey 1962-63. Washington Agricultural Experiment Stations, Washington State University. Based on 8 tons/acre, Labour 1.25/hr.

[2] Sample Cost to produce Late Italian Prunes in the Oliver District — June 1971 Based on 1 acre with expected yield of 14 tons and labour at $1.75. (British Columbia).

SOURCE: Washington State University, British Columbia Department of Agriculture.

TABLE 33. PLUM AND PRUNE PRODUCTION COSTS, MICHIGAN, WASHINGTON, OREGON.

Activities	Michigan[1]	Washington[2]	Oregon[3]
VARIABLE COSTS OF CULTURAL OPERATIONS:			
Labour (cultural)	38.42	124.40	32.40
Fertilizer (materials)	8.70	12.00	6.50
Spray (materials)	40.62	20.50	18.05
MACHINERY			
(Repair, fuel, oil, upkeep)	13.05	64.40	31.10
Cover-crop Seed	–	–	1.50
Irrigation	–	18.00	–
other	6.85	3.00	–
Total Cost/Acre	107.64	242.30	89.55
Total Cost/Ton	14.35	20.19	17.91
VARIABLE COST OF HARVESTING 8 TONS OF PLUMS:[a]			
Harvest Labour (includes piece work with boss picking, hauling, etc.)	188.36	191.40	169.40
Harvest equipment (cost of operation)	11.24	32.60	12.25
Total Cost/Acre	199.60	224.00	181.85
Total Cost/Ton	24.95	28.00	22.73

TABLE 33. (continued)

Activities	Michigan[1]	Washington[3]	Oregon[3]
FIXED COST:			
Taxes	10.00	15.00	6.00
Interest (or investment)	42.60	116.25	59.50
Depreciation	104.64	—	3.70
Total Fixed Cost	156.64	131.25	69.20
Fixed Cost/ton	20.88	10.93	13.84
Total Production Cost/acre	463.88	597.55	340.60
Total Cost/Ton	60.18	59.12	54.48

[1]Michigan used a yield of 7.5 tons

[2]Washington used a yield of 12 tons

[3]Oregon used a yield of 5 tons

[a]Harvest costs are reported on the basis of an 8 tons yield. They are adjusted from the yields reported in the above footnotes.

SOURCES:
1. Stephen B. Harsh, Myron P. Kelsey, and Glen Antle, "Economics of Plum Production in Western Michigan", Agricultural Economics Report No. 162, Michigan State University, May 1970.
2. Ken Brown and Jim Ballard, "Preliminary Italian Prune Enterprise Data Sheet", (Unpublished, Yakima Valley, Washington, April 1971)
3. Ken Brown, "Preliminary Prune Enterprise Data Sheet," (Unpublished, Willamette Valley, Oregon State University, Cooperative Extension Service, 1971)
4. Anderson, R. W. "Michigan's Purple Plum Industry" Unpublished Ph'D. thesis, Michigan State University 1972.

TABLE 34. FRESH PLUM & PRUNE UNLOADS IN MAJOR CANADIAN CITIES FROM BRITISH COLUMBIA, ONTARIO AND IMPORTS. CARLOT EQUIVALENTS

	Montreal			Toronto			Winnipeg			Vancouver		
Year	B.C.	Ont.	Imports	B.C.	Ont.	Imports	B.C.	Ont.	Imports	B.C.	Ont.	Imports
1955	1	155	111	—	139	35	42	12	56	13	—	30
1956	1	50	190	—	67	100	47	7	56	10	—	32
1957	—	136	146	—	159	91	65	9	44	16	—	23
1958	—	101	147	—	86	78	41	10	45	17	—	20
1959	3	57	217	1	72	124	49	4	48	24	—	24
1960	—	43	194	—	64	125	27	7	38	11	—	28
1961	—	59	194	—	107	133	37	9	43	20	—	31
1962	5	119	188	3	64	114	37	6	25	21	—	22
1963	1	178	191	—	147	121	42	2	28	17	—	29
1964	4	146	234	3	97	134	45	1	40	22	—	33
1965	—	127	246	5	73	159	20	5	52	9	—	45
1966	6	82	191	—	63	149	44	1	34	18	—	32
1967	11	52	216	5	36	145	29	—	37	15	—	35
1968	—	98	243	—	44	187	20	—	42	11	—	48
1969	—	98	149	—	25	140	15	—	48	10	—	32
1970	4	53	236	18	48	184	34	—	38	21	—	48
1971	14	75	176	6	56	158	21	—	40	18	—	49

SOURCE: Statistics Canada.

TABLE 35. FRESH PLUM & PRUNE UNLOADS IN SELECTED CANADIAN CITIES FROM BRITISH COLUMBIA AND ONTARIO. CARLOT EQUIVALENTS.

Year	Halifax		Saint John		Quebec City		Ottawa		Regina		Saskatoon		Edmonton		Calgary	
	Ont.	B.C.	Ont.	B.C.	Ont.	B.C.	Ont.	B.C.	Ont.	B.C.	Ont.	B.C.	Ont.	B.C.	Ont.	B.C.
1955	2	–	5	–	18	–	19	–	1	17	2	16	1	39	1	27
1956	1	–	3	–	6	–	5	–	2	12	2	12	–	43	–	30
1957	7	–	5	–	21	–	13	–	2	24	1	21	1	54	–	32
1958	2	–	5	–	15	–	11	–	1	15	2	17	2	30	–	27
1959	1	–	3	–	17	–	9	1	1	14	1	25	1	68	–	38
1960	2	–	2	–	12	–	5	–	2	15	1	22	–	40	–	31
1961	4	–	4	–	16	–	14	–	–	15	2	20	2	61	1	30
1962	3	–	1	–	12	–	9	–	–	20	2	31	6	63	–	37
1963	9	–	3	–	39	–	18	–	–	23	–	25	2	68	–	23
1964	5	–	2	–	25	–	11	–	–	21	–	23	–	67	–	22
1965	2	–	3	–	25	–	15	–	–	11	–	13	39	–	–	17
1966	3	–	1	–	25	–	8	–	–	20	–	26	1	54	–	23
1967	–	–	2	–	19	–	9	–	–	22	–	30	–	59	25	–
1968	5	–	2	–	39	–	13	–	–	16	–	17	–	36	–	24
1969	4	–	2	–	25	–	15	–	–	11	–	16	–	36	–	23
1970	1	–	–	–	17	–	9	–	–	16	–	19	–	53	–	20
1971	4	–	1	–	22	–	18	1	–	14	–	20	–	55	–	22

SOURCE: Statistics Canada.

TABLE 36. CANADIAN SWEET CHERRY PRODUCTION, IMPORTS, EXPORTS, PACK, STOCKS, PRICES AND FARM VALUE, 1954-71[1].

	Canadian Production	Fresh Imports	Canned Exports[2]	Domestic Pack	Average Prices[3]	Canned Stocks[4]	Total Farm Value
	000's lbs	000's lbs	000's lbs	000's lbs	$/ton	000's lbs	000's $
1954	8,700						
1955	11,050						
1956	4,800						
1957	11,950						1,739
1958	14,850			–	241.53	–	1,799
1959	12,300			–	277.43	–	1,708
1960	10,050			–	376.10	–	1,893
1961	15,300	2,618		3,302	297.26	535[b]	2,403
1962	21,100	2,449		4,372	279.26	1,050[b]	2,946
1963	20,300	2,454		3,199	309.80	1,106[b]	3,143
1964	27,900	3,045		4,751	330.40	442[b]	4,603
1965	12,100	3,728	4,027	1,885	332.93	1,002[b]	2,018
1966	20,650		3,993	6,958	353.81	217[c]	3,652
1967	26,600		6,157	7,788	315.26	1,409[c]	4,193
1968	14,200		2,160	1,922	507.76	1,338[c]	3,606
1969	15,600	2,754	3,573	6,504	334.29	311[c]	2,609
1970	19,250[a]		1,166	5,183	372.32	1,280[c]	3,584
1971	24,600[a]		1,669	3,506	–	2,434[c]	3,874

[1] Sales to processors not included since Sources do not separate sweet and sour cherry sales to processors.

[2] Includes all canned cherries (most of which are sweet cherries).

[3] Weighted average – calculated

[4] As of June 30

[a] Includes some sour from British Columbia

[b] Canners + Wholesalers

[c] Canners Only

SOURCES:

Production	Statistics Canada
Fresh Imports	Statistics Canada
Canned Exports	Trade of Canada
Domestic Pack	Statistics Canada
Prices	Statistics Canada
Stocks	Statistics Canada

TABLE 37. SWEET CHERRY TREE COUNT IN ONTARIO, 1956, 1961, 1966 AND 1971 SURVEYS

Variety	1956	1961	1966	1971	1971 as a % of 1966
	No. Trees	No. Trees	No. Trees	No. Trees	percent
Seneca	1,980	1,936	1,148	1,528	133.10
Early Rivers	–	955	1,339	1,238	92.46
Early Lyons	–	1,112	1,263	819	64.85
Vista (35031)	–	4,982	16,663	16,029	96.20
Black Tartarian	12,410	11,395	8,367	4,854	58.01
Venus (35042)	–	2,985	8,609	7,873	91.45
Valera (350427)	–	–	–	3,166	–
Victor	2,740	4,425	4,635	3,949	85.20
Schmidt	16,830	15,797	15,075	10,690	70.91
Bing	14,400	15,075	13,968	10,117	72.43
Napoleon	3,600	4,006	4,004	2,950	73.68
Windsor	25,950	21,690	18,459	11,898	64.46
Vic (27026)	–	3,092	6,084	4,141	68.06
Hedelfingen	16,663	22,725	28,602	25,666	89.73
Van	–	1,500	2,591	3,168	122.27
Other Varieties	15,660	7,709	11,411	5,923	51.91
TOTAL	110,200	119,384	142,218	114,009	80.17

SOURCE: 1971 Fruit Tree Census Part II, Tender Fruits, Ontario Ministry of Agriculture and Food.

TABLE 38. SAMPLE COSTS TO PRODUCE CHERRIES IN KILOWNA, BRITISH COLUMBIA, 1972[1].

Operation	M P H	No. Times	Hrs. per Acre	Cash and Labor Cost per Acre					
						Repairs		Material	
				Labor	Fuel	Tract.	Impl.	Kind & Quantity Cost	Total
Cultural Costs									
Pruning		1	36	90.00	5.76		10.80	Use Girette	106.56
Spraying		6	3	7.50	1.86	1.50	1.05		113.98
Fertilizing		1	2	5.00	1.91	.50	1.55	Minerals $2.80; 2200 lb. 34-0-0 $83.16	94.92
Weed Spraying		2	2	5.00	.64	.20	.06	Gramoxone $7.12	13.02
Mowing		4	3	7.50	1.86	1.50	1.62	Diesel Tractor	12.48
Irrigation 30HP		10	6	15.00	.32	.10	4.86	Sprinklers operating 120 hrs/ac. Tract. 1hr.	20.28
Miscellaneous		1	1/4	.62				Roden Control $1.50	2.12
–								Tot. Cultural Costs	$363.36
Picking (ladders)		1					4.64	Contr. 5¢/lb = $400.	404.64
Bin Hauling		1						Custon 20 Bins @35¢	7.00
Yarding Full Bins		1	20	50.00	10.88	2.40	5.94	Using Front End Loader & Rear Lift	69.22
Supervision		1	16	40.00					40.00
Clean-up		1	1/2	1.25	.16	.05	.03		1.49
								Tot. Harvest Costs	$522.35
Cash Overhead-Misc., Office, etc. 5% of $885.71									44.29
Taxes Water $24 Land $17.50									41.50
								Tot. Cash Overhead	$ 85.79
Management (5% of gross income)									$ 48.00

TABLE 38. (continued)

Operation	M P H	No. Times	Hrs. per Acre	Cash and Labor Cost per Acre: Labor	Repairs: Fuel	Repairs: Tract.	Repairs: Impl.	Material: Kind & Quantity Cost	Total

Annual Cost

Investment	Per Acre	Depreciation	Interest 8%
Land	5000.00		400.00
Crop	363.36		29.07
Buildings	300.00	7.50	12.00
Equipment	1351.85	175.40	54.07
Totals		182.90	495.14

$678.04

Expected Returns per Acre	$960.00	Total Cost per Acre	$1697.54
Expected Returns per Ton	$240.00	Total Cost per Ton	$ 424.39
per Lb.	$ .12	per Lb.	$ .21

[1] Specifications:

Orchard Age = 15 years old
Tree Spacing = 20' X 20' (108 Trees/Acre).
Expected Field = 4 Tons/Acre

Per Hour Labor Rate: Skilled = $2.50
Unskilled = $1.75
Horse Power: Gas = 30
Diesel = 40

SOURCE: British Columbia Department of Agriculture, February 28, 1972

TABLE 39. PEACH PRODUCTION IN SELECTED COUNTRIES.

Year	U.S.A.	Mexico	France	Italy	Greece	Spain	S. Africa[1]	Japan	Australia
					— 000 lbs. —				
1946									
1947									
1948[a]	341,800	106,700	244,200	615,700	26,000	142,400	42,600	79,600	119,100
1949									
1950									
1951									
1952									
1953[b]	2,983,200	118,100	406,000	992,400	44,700	214,100	112,900	189,200	131,500
1954									
1955									
1956									
1957									
1958[c]	3,581,900	128,900	630,200	1,861,300	135,400	210,300	137,100	376,500	151,500
1959									
1960									
1961									
1962									
1963	3,544,800	160,800	1,005,300	2,793,200	125,700	286,600	112,000	437,800	209,600
1964	3,573,500	163,200	914,900	2,885,200	207,200	337,700	138,900	456,300	221,500
1965	3,497,500	158,700	1,014,100	2,865,600	205,800	373,200	183,700	405,900	254,200
1966	3,405,000	165,400	641,500	3,031,300	209,800	306,000	186,000	562,200	275,700
1967	2,685,227	167,551	936,964	2,480,198	341,716	299,828	330,693	630,521	266,759
1968	3,591,326	169,756	1,355,841	2,821,914	370,376	460,766	173,063	652,568	282,191
1969	3,666,283	178,574	1,155,221	1,955,498	363,762	421,082	330,693	610,680	238,099

[1] Unofficial Statistics

[a] Average 1948-1952
[b] Average 1953-1957
[c] Average 1958-1962

SOURCES: Agricultural Statistics (U.S. Dept. of Agric.)
Canadian Farm Economics Vol. 3 #5 Dec. '68 (Can. Dept. of Agric.)
Production Year Book F.A. O.Vol. 13, Vol. 14, Vol. 24

TABLE 40. PEAR PRODUCTION IN SELECTED COUNTRIES[1].

Year	U.S.A.	Mexico	France	Italy	Greece	Spain	S. Africa	Japan	Australia
					000's of pounds				
1946									
1947									
1948[a]	1,419,775	33,069		723,115	66,139	154,323	41,888	92,594	50,706
1949									
1950									
1951	1,413,161	35,274		811,300	70,548	176,370	39,683	99,208	48,502
1952	1,446,231	37,479		875,234	77,162	158,733	61,729	110,231	52,911
1953	1,369,069	37,479		908,303	88,185	169,756	41,888	105,822	57,320
1954	1,444,026	33,069		776,026	85,980	167,551	72,752	90,389	48,502
1955	1,452,845	35,274		967,828	63,934	171,960	77,162	116,845	48,502
1956	1,580,713	37,479		970,033	94,799	211,644	74,957	88,185	39,683
1957	1,549,848	37,489		784,845	97,003	231,485	63,934	105,822	48,502
1958	1,415,366	37,489		1,137,584	68,343	238,099		72,752	
1959									
1960									
1961[b]	1,227,973	63,934	903,894	2,059,115	211,644	324,079	127,868	727,525	273,373
1962									
1963									
1964									
1965									
1966	1,499,142[u]	74,957[u]	815,709[u]	3,505,346[u]	238,099[u]	392,422[u]	182,983[•,u]	890,666[u]	337,307[u]
1967	903,894[u]	77,162[u]	886,257[u]	2,903,485[u]	271,168[u]	262,350[u]	163,142[•,u]	890,666[u]	297,624[u]
1968	1,232,383[u]	77,162[u]	1,084,673[u]	3,075,445[u]	286,601[u]	498,244[u]	149,914[•,u]	1,049,399[u]	332,898[u]
1969	1,424,185[u]	83,776[u]	996,488[u]	3,602,349[u]	229,280[u]	491,630[u]	149,914[u,f]	1,078,059[u]	235,894[u]
1970	1,082,468[u]	88,185[u,f]	1,122,152[u]	3,794,151[u]	264,554[u,f]	427,696[•,u]	149,914[u,f]	1,080,264[u,f]	405,650[u]

[1] These figures have been converted from metric tons.

[a] Average 1948-1952
[b] Average 1961-1965
[u] Unspecified
[f] F.A.O. Estimate
[•] Unofficial figure

SOURCES: Production Year Book, Vol. 24 — Vol. 13 — Vol. 14

TABLE 41. APRICOT PRODUCTION IN SELECTED COUNTRIES

Year	U.S.A.	Mexico	France	Italy	Greece	Spain	S. Africa[1]	Japan	Australia
					000's of pounds				
1946									
1947									
1948[a]	407,855	11,023	74,957	59,525	19,842	143,300	37,479		66,139
1949									
1950									
1951	368,172	n.a.	68,343	59,525	17,637	154,323	30,865		70,548
1952	354,944	n.a.	90,389	79,366	26,455	127,868	39,683		61,729
1953	487,221	n.a.	105,822	77,162	28,660	138,891	52,911		61,729
1954	319,670	n.a.	85,980	74,957	19,842	154,323	48,502		74,957
1955	562,178	n.a.	88,185	72,752	8,818	132,277	55,116		66,139
1956	392,422	n.a.	30,865	77,162	22,046	174,165	55,116		68,343
1957	381,399	n.a.	238,099	81,571	37,479	185,188	n.a.		74,957
1958	216,053	n.a.	68,343	55,116	n.a.	275,578	n.a.		61,729
1959									
1960									
1961[b]	399,036	15,432	202,825	134,482	52,911	290,101	74,957		88,184
1962									
1963									
1964									
1965	451,947	15,432	246,917	156,528	59,525	440,924	79,366		85,980
1966	388,013	15,432	99,208	169,756	66,139	348,330	66,139		114,640
1967	295,419	15,432	211,644	143,300	83,776	297,624	63,934		72,752
1968	297,624	17,637	291,010	242,508	79,366	407,855	66,139[c]		97,003
1969	460,766	17,637	125,663	152,119	63,934	220,462	61,139[c]		101,413

[1] Unofficial figure

[a] Average 1948-1952
[b] Average 1961-1965
[c] F.A.O. estimate

n.a. Not available

SOURCES: Production Year Book Vol. 13 – Vol. 14 – Vol. 15
Agricultural Statistics – U.S.D.A.

TABLE 42. U.S. PEACH PRODUCTION AND UTILIZATION[1] BY REGIONS

	Total U.S.			North Atlantic[2]			South Atlantic[3]		
	Production	Fresh Sales	Canned	Production	Fresh Sales	Canned	Production	Fresh Sales	Canned
	000's of pounds								
1955	2,592,600	990,050	1,332,150	314,550	279,500	14,250	93,250	76,850	7,650
1956	3,503,950	1,464,750	1,569,850	286,500	252,000	19,100	496,500	417,200	20,750
1957	3,116,750	1,398,850	1,341,300	224,750	199,600	11,300	518,000	446,600	25,750
1958	3,553,450	1,773,850	1,405,750	365,700	323,150	20,850	701,000	579,650	55,750
1959	3,716,950	1,677,950	1,588,800	335,300	296,750	18,750	642,250	531,850	46,700
1960	3,715,750	1,740,200	1,590,800	336,600	302,500	21,400	743,500	593,250	92,600
1961	3,894,750	1,762,350	1,681,850	253,150	229,450	16,300	860,250	682,200	81,950
1962	3,789,450	1,552,600	1,757,800	289,200	267,200	9,200	759,750	611,850	70,650
1963	3,692,450	1,460,650	1,859,050	243,200	225,450	8,700	828,250	650,900	109,900
1964	3,722,400	1,265,700	1,999,100	309,100	281,550	16,050	271,250	231,650	11,800
1965	3,497,500	1,311,700	1,648,200	262,000	230,000	10,200	770,400	494,300	110,300
1966	3,407,400	1,196,100	1,830,500	169,200	155,800	4,900	661,400	526,400	83,800
1967	2,493,300[a]	934,800	1,413,400	94,500[a]	91,000	2,300	388,100[a]	350,400	22,400
1968	3,381,300	1,324,700	1,874,600	231,400	218,900	9,700	795,100	632,700	132,200
1969	3,400,400	1,382,300	1,873,500	251,500	239,600	10,400	654,900	523,400	96,200
1970	2,782,500	1,184,900	1,471,200	197,700	185,400	10,500	556,300	477,700	60,800

[1] Only Fresh Sales and Canned-Rest of total = economic abandonment, farm disposition or processed differently. eg. dried, frozen
[2] N. H., Mass., R.I., Conn., N.Y., N.J., and Pa.
[3] Del., Md., Va., W. Va., N.C., S.C., and Ga.

[a] 1967-1970-this figure is total sales and not total production-difference = economic abandonment and farm disposition

SOURCE: Fruits non-citrus by states-production, use and value
U.S.D.A. E.R.S. Fruit 2-1, Annual.

TABLE 43. CALIFORNIA FREESTONE PEACH ACREAGE, PRODUCTION, PRICE AND VALUE, 1954-1971.

	Acreage		Production		Value	
Year	Bearing Acres	Non-Bearing Acres	Total 000's of lbs	Per Bearing Acre Tons	$/Ton $[1]	Total 000's $[2]
1954	31,793	7,977	536,000	8.4	62.60	16,777
1955	30,593	11,250	530,000	8.7	75.30	19,954
1956	32,223	13,639	578,000	9.0	70.20	20,288
1957	32,720	15,387	582,000	8.9	61.50	17,896
1958	33,571	14,676	556,000	8.3	59.10	16,430
1959	34,119	13,037	656,000	9.6	50.70	16,325
1960	35,895	9,506	596,000	8.3	50.90	15,168
1961	36,280	7,062	602,000	8.3	51.80	15,592
1962	35,751	4,698	620,000	8.7	52.60	16,306
1963	33,613	3,070	616,000	9.2	55.70	19,096
1964	33,734	2,138	656,000	9.7	61.70	22,304
1965	31,738	1,967	580,000	9.1	51.70	17,255
1966	29,530	2,080	516,000	8.7	74.50	21,053
1967	25,150	3,970	412,000	7.5	92.40	20,559
1968	23,660	4,420	500,000	10.6	92.70	25,600
1969	23,400	–	480,000	10.2	76.60	20,352
1970	22,790	6,160	400,000	8.8	79.40	177,880
1971	20,897	5,719	404,000	9.7	86.20	18,867

[1] Growers' Return/Ton

[2] Grower's Return/Ton x Production does not equal Total Value; Total Value = Production x Price/Ton (which is not included in this table).

SOURCE: California Fruit and Nut Statistics, California Crop and Livestock Reporting Service.

TABLE 44. CALIFORNIA CLINGSTONE PEACH ACREAGE, PRODUCTION, PRICE AND VALUE, 1954-1971.

Year	Acreage		Production[1]		Value	
	Bearing Acres	Non-Bearing Acres	Total 000's of lbs	Per Bearing Acre Tons	$/Ton [2]	Total 000's $
1954	43,935	12,732	924,000	10.5	54.70	24,177
1955	45,032	13,965	1,084,000	12.0	80.50	41,699
1956	46,840	16,109	1,300,000	13.9	70.90	40,697
1957	46,179	21,942	1,074,000	11.6	64.10	32,050
1958	46,825	26,334	1,010,000	10.8	65.00	30,810
1959	49,359	31,263	1,218,000	12.3	58.80	32,725
1960	51,448	29,152	1,224,000	11.9	55.90	31,472
1961	54,411	23,539	1,332,000	12.2	67.50	40,196
1962	56,429	21,393	1,470,000	13.0	64.00	41,894
1963	60,295	16,574	1,468,000	12.2	57.20	49,315
1964	59,780	15,207	1,740,000	14.6	61.50	60,249
1965	58,773	17,676	1,458,000	12.4	68.00	53,568
1966	61,640	19,260	1,678,000	13.6	62.80	63,353
1967	61,830	21,250	1,376,000	11.0	82.20	54,458
1968	63,110	22,550	1,708,000	13.5	75.20	70,935[b]
1969	63,770	–	1,800,000	14.1	73.40	70,141[b]
1970	59,020	20,420	1,442,000	12.2	80.60	61,428[b]
1971	52,396	17,523	1,278,000	12.2	78.60	55,141[b]

[1] Does not include green drop tonnage.
[2] Growers' Return/Ton

[b] Excludes culls and cannery diversion.

SOURCE: California Fruit and Nut Statistics – California Crop and Livestock Reporting Service.

TABLE 45. U.S. PEACH EXPORTS TO CANADA FRESH AND CANNED, 1954-1971.

Year	FRESH		CANNED		
	Volume 000's of lbs.	Value 000's $	Volume 000's of lbs.	Value 000's $	% of Canadian Canned Imports
1954	24,894	1,502	11,381	1,273	94
1955	12,789	969	9,536	1,163	89
1956	39,927	2,360	13,990	1,720	94
1957	21,174	1,403	27,028	2,431	97
1958	26,635	1,500	21,423	2,383	98
1959	32,023	1,905	18,895	2,107	97
1960	47,230	2,577	31,777	3,345	98
1961	36,360	2,141	29,078	3,076	98
1962	31,556	2,068	28,144	3,090	97
1963	36,113	2,593	31,725	3,592	88
1964	18,410	2,037	26,609	3,334	72
1965	46,374	3,342	38,351	4,306	70
1966	33,914	3,216	39,441	4,742	67
1967	23,891	3,284	36,368	4,476	54
1968	40,576	3,790	37,622	5,155	55
1969	49,447	4,706	45,902	6,068	73
1970	33,441	3,955	53,871	6,824	90
1971	34,680	4,248	44,814	7,020	75

SOURCE: Trade of Canada Imports by Commodities.

TABLE 46. AUSTRALIAN EXPORTS OF PEACHES AND PEARS BY DESTINATION, 1961 TO 1971. ('000 Basic Cartons of 2 doz. 29 oz.)

Country	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971
						PEACHES					
United Kingdom	759	1,505	1,537	1,639	1,613	1,516	1,291	1,779	1,312	1,630	n.a.
Canada	7	16	70	195	234	332	461	451	371	72	n.a.
Europe[a]							1,785	1,758	721	774	n.a.
Other countries	27	43	96	149	913	1,011	120	124	164	123	n.a.
Total	793	1,564	1,703	1,983	2,760	2,859	3,657	4,112	2,568	2,599	n.a.
						PEARS					
United Kingdom	1,828	2,149	1,999	1,989	1,616	2,135	1,662	2,025	1,177	1,604	n.a.
Canada	15	28	55	135	168	196	122	144	100	172	n.a.
Europe[a]							175	234	141	198	n.a.
Other countries	28	65	68	112	238	326	136	253	76	370[b]	n.a.
Total	1,871	2,242	2,122	2,236	2,022	2,657	2,095	2,656	1,494	2,244	n.a.
						MIXED FRUIT[c]					
United Kingdom	116	140	170	289	386	488	596	767	598	908	n.a.
Canada		3	6	18	45	111	139	241	121	97	n.a.
Europe[a]							323	308	236	297	n.a.
Other countries	5	15	25	46	142	209	74	74	104	94	n.a.
Total	121	158	201	353	573	808	1,132	1,390	1,059	1,396	n.a.
						APRICOTS					
United Kingdom	67	275	156	126	126	192	246	264	108	157	n.a.
Canada	1	27	25	49	43	61	51	85	42	33	n.a.
Europe[a]							49	39	43	40	n.a.
Other countries	8	16	20	22	46	51	32	29	52	37	n.a.
Total	76	318	201	197	215	304	378	417	245	269	n.a.
						ALL DECIDUOUS FRUIT					
United Kingdom	2,770	4,069	3,862	4,043	3,741	4,331	3,795	4,835	3,195	4,299	n.a.
Canada	23	74	156	397	490	700	773	921	634	374	n.a.
Europe[a]						1,303	2,332	2,339	1,141	1,309	n.a.
Other countries	68	139	209	329	1,339	294	362	480	396	524	n.a.
Total	2,861	4,282	4,227	4,769	5,570	6,628	7,262	8,575	5,366	6,506	6,200[d]

[a]Where not stated, included if any in 'other countries'.

[b]Of which US imports comprised 201.

[c]Includes two fruits, fruit cocktail and fruit salad.

[d]Estimated by Australian Canned Fruit salad.

n.a. — not available.

SOURCE: Australian Canned Fruits Board, Annual Report (various issues).

TABLE 47. AUSTRALIAN CANNED DECIDUOUS FRUIT PRODUCTION

Year	Apricots	Peaches	Pears	Mixed[1] Fruits	Total
			1,000 cases[a]		
1956-60	702	1,863	2,130	233	4,748
1961	334	1,675	2,621	190	4,820
1962	910	3,259	3,006	441	7,616
1963	823	3,331	2,653	442	7,249
1964	437	3,333	3,207	616	7,593
1965	750	4,319	2,455	894	8,418
1966	663	4,565	3,384	1,220	9,832
1967	1,054	5,038	2,797	1,406	10,295
1968	723	5,134	3,206	1,902	10,965
1969	699	4,063	1,795	1,568	8,125
1970	773	3,936	4,394	2,394	11,495
1971[b]	1,206	4,852	3,478	1,777	11,313
1972[c]	950	4,500	2,800	2,150	10,400

[1] Includes two-fruits, fruit salad and fruit cocktail pack.

[a] Cases of equivalent 24 No. 2 1/2 cans
[b] Preliminary
[c] Estimates

SOURCE: Foreign Agriculture Circular, Canned Fruit FCAN 3-70, U.S.D.A.
Foreign Agricultural Service February 1972.
1972 Estimates from the Fruit and Vegetable Division of the U.S.D.A. Foreign Agricultural Service.

TABLE 48. APPARENT PER CAPITA ANNUAL CONSUMPTION OF AUSTRALIAN CANNED FRUIT.

Year	Apricots	Peaches	Pears	Mixed Deciduous Fruits [1]	Total Deciduous Fruit	Other (b) [2]	Total
	lb	lb	lb	lb	lb	lb	lb
1956-57	1.8	3.0	2.4	0.6	7.8	5.6	13.3
1957-58	1.7	3.8	2.2	1.0	8.7	5.9	14.6
1958-59	1.0	4.0	2.3	0.5	7.8	5.2	13.0
1959-60	2.1	4.7	2.1	0.4	9.3	6.0	15.3
1960-61	1.8	5.1	3.0	0.3	10.2	7.3	17.5
1961-62	1.8	4.8	3.2	0.5	10.3	6.1	16.4
1962-63	2.2	7.2	3.8	1.0	14.2	6.4	20.6
1963-64	2.0	5.3	2.3	1.0	10.6	8.1	18.7
1964-65	1.3	6.4	3.5	1.2	12.4	7.4	19.8
1965-66	2.3	6.3	2.8	1.6	13.0	7.5	20.5
1966-67	2.3	6.7	3.0	1.0	12.3	8.2	20.5
1967-68	2.2	8.0	3.4	1.9	15.5	8.2	23.9
1968-69	2.0	6.2	4.0	1.8	14.0	7.4	21.4
1969-70[a]	2.3	5.7	2.8	1.5[b]	12.3	7.6	21.8

[1] Estimate based on production and exports in the calendar year (second year named). Includes two fruits, fruit salad and fruit cocktail. This last mentioned pack includes small quantities of pineaple.
[2] Mainly pineapple.

[a] Preliminary.
[b] Adjusted for an increase in stocks in that year.

SOURCE: Commonwealth Bureau of Census and Statistics, Report on Food Production and the Apparent Consumption of Foodstuffs and Nutrients; Australian Canned Fruit Board, Annual Report (various issues).

TABLE 49. TOTAL PER CAPITA FRUIT CONSUMPTION IN CANADA, U.S., U.K. AND AUSTRALIA. 1950-1968. (INCLUDES ALL FRUIT – FRESH AND PROCESSED – EXPRESSED IN FRESH EQUIVALENTS)

Year	Canada	U.S.	U.K.	Australia
		Pounds Per Capita		
1950	133.0	182.1	105.2	164.2
1951	149.3	190.6	111.1	172.8
1952	166.7	194.0	105.5	159.7
1953	163.7	192.9	115.2	140.2
1954	159.7	187.9	125.2	165.4
1955	183.2	201.7	120.1	163.2
1956	184.3	199.3	116.4	173.8
1957	177.3	200.4	118.1	150.9
1958	174.7	191.4	112.3	167.5
1959	189.4	195.5	126.6	158.5
1960	178.8	197.7	123.4	176.5
1961	173.7	187.8	116.9	173.0
1962	167.3	189.0	124.6	179.0
1963	172.7	165.9	120.1	193.9
1964	178.5	165.1	121.5	186.6
1965	180.0	174.2	122.2	192.4
1966	185.6	176.6	123.4	193.5
1967	194.9	191.1	118.0	192.3
1968	190.9	183.5	122.7	190.0

SOURCE: "Fruit", A review of production and trade relating to fresh, canned, frozen and dried fruit, fruit juices and wine. Published by The Commonwealth Secretariat.

TABLE 50. AUSTRALIAN CANNED DECIDUOUS FRUIT EXPORTS.

Year	Apricots	Peaches	Pears	Mixed[1] Fruit	All Deciduous Fruit
			000 cases[a]		
1956-60	360	1,004	1,655	103	3,122
1961	76	793	1,871	121	2,861
1962	318	1,564	2,242	158	4,282
1963	201	1,703	2,122	201	4,227
1964	197	1,983	2,236	353	4,769
1965	215	2,760	2,022	573	5,570
1966	304	2,859	2,657	808	6,628
1967	378	3,657	2,095	1,132	7,262
1968	417	4,112	2,656	1,390	8,575
1969	245	2,568	1,494	1,059	5,366
1970	269	2,599	2,244	1,396	6,506
1971[b]	330	2,490	2,055	1,340	6,215

[1] Includes two-fruit, fruit salad and fruit cocktail sales

[a] Cases of equivalent 24 No. 2 1/2 cans

[b] Estimates

SOURCE: Foreign Agricultural Circular. Canned Fruit FCAN 3-70, U.S.D.A.
Foreign Agricultural Service December 1970.
The Bureau of Agricultural Economics Canberra, A.C.T. The Outlook for Fruit National Agricultural Outlook Conference, Canberra 1972

TABLE 51. BRITISH COLUMBIA TENDER FRUIT ENTERING EACH MARKET, BY PERCENTAGE. 1971.

	Conventional Retail		Roadside[1]		Processed (Manufacturing)	
	Production	Value	Production	Value	Production	Value
	Percent					
Pears	67.1	73.3	7.3	7.6	25.6	19.1
Plums	33.5	18.5	66.5	81.5	—	—
Prunes	66.9	70.3	6.4	15.5	26.7	14.2
Sweet Cherries	64.0	71.1	15.5	17.7	20.5	11.2
Peaches	40.5	38.0	46.5	51.9	13.0	10.1
Apricots	47.6	47.5	14.3	21.8	38.1	30.7

[1] Roadside sales include pick-your-own sales and are arrived at by subtracting retail and processed sales from total marketings.

SOURCE: Horticultural Branch of the British Columbia Department of Agriculture.

TABLE 52. BRITISH COLUMBIA TENDER FRUIT SALES AND VALUES. 1971.

	Conventional Retail Sales			Roadside Sales[1]			Processed (Manufactured)		
	Quantity	Price	Total Value	Quantity	Price	Total Value	Quantity	Price	Total Value
	000's lbs.	$/lb.	$	000's lbs.	$/lb.	$	000's lbs.	$/lb.	$
Pears	24,577	.0511	1,257,233	2,672	.0486	129,940	9,358	.0351	328,822
Plums	63	.0779	4,908	125	.1731	21,640	—	—	—
Prunes	6,797	.0591	401,856	646	.1372	88,650	2,716	.0299	81,234
Sweet Cherries	8,241	.1924	1,585,302	1,992	.1976	393,710	2,636	.0944	248,891
Peaches	9,931	.0853	847,187	11,438	.1010	1,156,300	3,190	.0699	223,125
Apricots	3,157	.0667	210,527	951	.1015	96,500	2,522	.0540	136,113

	Total Sales	Total Value
	000's lbs.	$
Pears	36,607	1,715,995
Plums	188	26,548
Prunes	10,159	571,740
Sweet Cherries	12,869	2,227,903
Peaches	24,599	2,226,612
Apricots	6,630	443,140

[1] Roadside sales are arrived at by subtracting retail and processed sales from total marketings.

SOURCE: Horticultural Branch of the British Columbia Dept. of Agriculture.

TABLE 53. ONTARIO TENDER FRUIT ENTERING EACH MARKET, BY PERCENTAGE. 1971.

	Conventional Retail		Roadside[1]		Processed (Manufacturing)	
	Production	Value	Production	Value	Production	Value
	Percent					
Bartlett Pears	25.7	24.4	22.4	28.3	51.9	47.3
Kieffer Pears	19.9	19.9	—	—	80.1	80.1
Prunes & Plums	64.2	66.5	20.7	20.5	15.1	13.0
Sweet Cherries	24.2	27.1	40.0	45.3	35.8	27.6
Peaches	43.3	43.9	28.4	33.8	28.3	22.3

[1] Roadside sales include pick-your-own sales and are arrived at by subtracting retail and processed sales from total marketings.

SOURCE: Ontario Tender Fruit Growers Marketing Board.

TABLE 54. ONTARIO TENDER FRUIT SALES AND VALUES, 1971.

	Conventional Retail Sales			Roadside Sales[1]			Processed (Manufactured)		
	Quantity	Price	Total	Quantity	Price	Total	Quantity	Price	Total
	000's lbs.	$/lb.	$	000's lbs.	$/lb.	$	000's lbs.	$/lb.	$
Bartlett Pears	8,508.8	.0700	595,616	7,405.4	.0934	691,664	17,180.0	.0673	1,156,214
Kieffer Pears[a]	3,717.7	.0350	130,119	—	—	—	14,987.9	.0350	524,576
Prunes & Plums	7,339.7	.0864	634,150	2,366.5	.0826	195,473	1,721.8	.0721	124,142
Sweet Cherries	2,482.0	.1570	389,674	4,095.7	.1590	651,216	3,671.5	.1079	396,155
Peaches	43,827.5	.0895	3,922,561	28,779.3	.1048	3,016,070	28,687.2	.0695	1,993,760

	Total Sales	Total Value
	000's lbs.	$
Bartlett Pears	33,094.2	2,443,494
Kieffer Pears	18,705.6	654,695
Prunes & Plums	11,428.0	953,765
Sweet Cherries	10,249.2	1,437,045
Peaches	101,294.0	8,932,391

[1] Roadside sales were arrived at by deducting known processing sales and sales through central marketing from estimates supplied by the Ontario Ministry of Agriculture and Food.

[a] The values reported as retail sales are in fact all other sales than processing, but are believed to be mostly central sales.

SOURCE: Ontario Tender Fruit Growers Marketing Board.

TABLE 55. NUMBER OF FIRMS CANNING TENDER FRUIT CROPS IN CANADA, BY PROVINCE[1] 1965 AND 1972.

	Ontario		Nova Scotia		British Columbia	
	1965	1972	1965	1972	1965	1972
Peaches	19	4	—	—	7	5
Pears	18	4	4	2	11	6
Apricots	2	—	—	—	9	5
Plums (Prunes)	9	4	—	—	5	5
Sweet Cherries	—	4	—	—	—	5

[1] Several firms have more than one plant located in a province, consequently there may be more plants operating in a province than shown here. Only one firm operates in more than one province.

SOURCE: Production and Marketing Branch, Canada Dept. of Agriculture.

TABLE 56. FARM VALUE FOR ALL TENDER FRUIT BY COMMODITY AND TOTAL.

Year	Apricots	Peaches	Pears	Plums[1]	Sweet Cherries	Total Tender Fruit
	000's $	000's $	000's $	000's $	000's $	000's $
1946		5,365	2,278			7,643
1947		4,508	2,178			6,686
1948		4,953	1,784			6,737
1949		4,987	2,057			7,044
1950	77	2,754	1,877	1,016		5,724
1951	116	4,004	2,238	865		7,223
1952	342	5,152	2,371	1,033		8,898
1953	425	5,553	2,653	1,252		9,883
1954	293	5,208	2,246	1,467		9,214
1955	316	6,125	2,579	1,068		10,088
1956	194	4,384	2,853	896		8,327
1957	523	6,218	2,201	946	1,739	11,627
1958	443	5,761	2,986	1,194	1,799	12,183
1959	464	5,444	2,355	1,024	1,708	10,995
1960	674	6,137	3,344	970	1,893	13,018
1961	626	6,674	3,101	1,257	2,403	14,061
1962	714	5,784	3,471	1,031	2,946	13,946
1963	327	6,933	3,999	1,434	3,143	15,836
1964	754	8,128	3,942	1,171	4,603	18,598
1965	13	5,531	2,661	1,209	2,018	11,432
1966	536	7,434	4,240	1,491	3,652	17,353
1967	343	7,207	4,614	1,364	4,193	17,721
1968	497	8,963	5,065	1,416	3,606	19,547
1969	11	8,935	3,312	1,238	2,609	16,105
1970	546	9,863	5,241	1,629	3,584	20,729
1971	443	11,166	4,902	1,576	3,874	21,961

[1] Total includes prunes.

SOURCE: Crop and Seasonal Price Summaries, Statistics Canada.

TABLE 57. TOTAL GROSS CASH RECEIPTS FROM AGRICULTURE, FARM CASH RECEIPTS FROM ALL FRUIT, TENDER FRUIT AS A PERCENTAGE OF ALL FRUIT AND FARM CASH FROM FRUIT AS A PERCENTAGE OF GROSS CASH RECEIPTS FROM AGRICULTURE.

Year	Total Gross Receipts From Agriculture	Farm Cash Receipts From All Fruit	Tender Fruit Receipts[1] As a % of All Fruit Receipts		Farm Cash From All Fruit As a % of Total Agriculture Receipts	
	000's $	000's $	Percent		Percent	
1946	1,698,801	41,691			2.45	
1947	1,935,809	39,870	11.31		2.06	
1948	2,402,075	40,566	12.21		1.69	
1949	2,415,194	35,290	14.13		1.46	1.61
1950	2,135,784	33,621	17.03		1.57	
1951	2,735,538	34,875	20.71		1.27	
1952	2,803,665	42,449	20.96		1.51	
1953	2,710,162	46,758	21.14	21.33	1.73	
1954	2,295,135	48,205	19.11		2.10	1.73
1955	2,272,396	40,801	24.72		1.80	
1956	2,534,304	37,743	22.06		1.49	
1957	2,517,904	42,544	27.33		1.69	
1958	2,814,357	44,678	27.27	25.44	1.59	
1959	2,775,960	43,057	25.54		1.55	1.70
1960	2,811,702	52,081	25.00		1.85	
1961	2,923,682	53,722	26.17		1.84	
1962	3,182,249	58,355	23.90		1.83	
1963	3,214,620	66,433	23.84	23.42	2.06	
1964	3,504,123	73,491	25.31		2.09	1.88
1965	3,818,858	63,957	17.87		1.67	
1966	4,294,524	75,759	22.91		1.76	
1967	4,382,549	79,637	22.25		1.82	
1968	4,364,469	86,606	22.57	22.73	1.98	
1969	4,199,819	79,549	20.37		1.89	1.91
1970	4,197,203	83,205	25.53		1.98	
1971	4,513,147	84,820			1.87	

[1] From 1947-49 tender fruit totals include only peaches; from 1950 to 1956 tender fruit totals include peaches, pears, apricots and plums; from 1957 to 1969 sweet cherries are added to tender fruit totals.

SOURCE: Handbook of Agriculture Statistics Part II, Statistics Canada.

Appendix - B

FACTORS AFFECTING THE PRICE PAID TO PRODUCERS FOR PEACHES SOLD FOR PROCESSING IN ONTARIO

The purpose of this analysis was to study several factors which had been suggested as causing variations in the processing price of Ontario peaches and to determine which of these factors were the most significant. Some of the factors suggested include; (1) Total Canadian production; (2) Canadian stocks; (3) disposable personal income; (4) production of competing fruit and (5) U.S. production.

The factors listed represent the quantifiable variables which are believed to explain a significant portion of the variation in the price of Ontario processing peaches. The extent of their effect on price was estimated using ordinary least squares regression.

The following equation mathematically relates the more significant variables[1].

$P_p = 140.953 - 0.000355\ X_1 - 0.001198\ X_2 + 0.000772\ X_3 + 0.000823\ X_4 - 0.000005\ X_5$ (.000049) (.000242) (.000254) (.000130) (.000003)

$R_2 = .983$ Standard Error of Estimate = 3.1167 d = 2.19537 (Durbin - Watson Statistic) Standard Errors in parenthesis.

where:

P_p = Price received by Ontario growers for peaches sold for processing (dollars per ton)

X_1 = Ontario peach production (000's of lbs.)
X_2 = Canadian peach stocks (000's of lbs.)
X_3 = Canadian pear stocks (000's of lbs.)
X_4 = Canadian disposable income (millions of $'s)
X_5 = Total U.S. peach production (000's of lbs.)

The analyses indicate that Ontario peach production, Canadian pear stocks, disposable income and total U.S. peach production together account for approximately 98 percent of the total variation in the annual price of processing peaches in Ontario. The actual prices and estimates derived by using this equation are presented in Table 2. The data utilized in the analysis is presented in Table 1.

Although it was suggested that total Canadian peach production is a significant variable affecting price, the regression analysis did not support this hypothesis. This is not surprising since the only area of peach production outside Ontario is B.C.'s Okanagan Valley and the cost of shipping B.C. peaches to Ontario for processing would be too great to make them competitive with Ontario processing peaches. It was also found that stocks of Canadian canned pears was a more significant variable affecting the processing price of Ontario peaches than Canadian pear production.

The regression equation which was developed as a result of the analysis can be used to indicate future price levels. Two examples using current values will best illustrate the use of this equation.

To estimate the 1971 processing peach price the following data for 1971 is used:

Ontario peach production 101,300,000 lbs. (i.e. X_1 = 101,300)[3]
Canadian peach stocks 5,711,000 lbs. (i.e. X_2 = 5,711)
Canadian pear stocks 10,196,000 lbs. (i.e. X_3 = 10,196)[2]
Disposable Income $59,300
U.S. Peach Production 2,907,558,000 lbs. (i.e. X_5 = 2,907,558)[7]

The equation yields:

$P_p = 140.953 - 0.000355\ (101,300) - 0.001198\ (5,711) + 0.000772\ (10,196) + 0.00823\ (59,300) - 0.000006\ (2,907,558)$

$= 140.953 - 35.962 - 6.842 + 7.871 + 48,804 - 17.445$

= $137.38 (1971 estimated processing peach price).

The 1971 estimated price for Ontario processing peaches is $137.38. This is very close to the actual price of $142.40 reported by the Ontario Ministry of Agriculture and Food in 1971.

The 1972 Ontario peach crop was smaller than normal due to low temperature injury in Southwestern Ontario. To estimate the 1972 price the following estimates were used:

Ontario peach production 78,600,000 lbs. (i.e. X_1 = 78,600)[5]
Canadian peach stocks 7,369,000 lbs. (i.e. X_2 = 7,369)[6]
Canadian pear stocks 12,132,000 lbs. (i.e. X_3 = 12,132)[6]

Real disposable income $61,200[4]

U.S. Peach Production 2,529,576,000 lbs. (i.e. X_5 = 2,529,576)[7]

P_p = 140.953 - 0.000355 (78,600) - 0.001198 (7,369) + 0.000772 (12,132) + 0.000823 (61,200) - 0.000006 (2,529,576)

= 140.953 - 27.903 - 8.828 + 9.366 + 50.368 - 15.177

= $148.78 (1972 estimated processing peach price).

The price for Ontario processing peaches in 1972 is estimated to be $148.78. The actual price received by growers in 1972, as reported by the Ontario Fruit Growers Marketing Board, was $160.50 per ton.

Growers, processors and others included in the industry may use this equation as a tool to help them estimate future prices. Because the relationships between variables and the effect of each variable on the price may differ from year to year those utilizing the equation should realize that it cannot be expected to estimate the price exactly.

[1] The equation was run using data in the logarithmic and non-logarithmic form. Only the most significant results are reported.

[2] June stocks, 1971.

[3] CDA, Crop and seasonal Price Summaries.

[4] Author's estimate.

[5] Preliminary estimate, CDA.

[6] June stocks, 1972.

[7] USDA, Fruit Situation.

TABLE 1 — ONTARIO PEACH PRODUCTION, CANADIAN PEACH STOCKS, CANADIAN PEAR STOCKS, CANADIAN DISPOSABLE INCOME, ONTARIO PEACH PROCESS PRICES AND TOTAL U.S. PEACH PRODUCTION.

Year	Ontario Peach Production 000's of lbs.	Canadian Peach Stocks 000's of lbs.	Canadian Pear Stocks 000's of lbs.	Canadian Disposable Income $ Million	Ontario Peach Process Price $/ton[1]	Total U.S. Peach Production 000's of lbs.
1956	68,350	20,514	19,013	20,599	104.10	3,319,300
1957	113,300	13,940	19,810	22,041	102.30	2,992,400
1958	129,400	20,401	11,843	23,553	76.70	3,446,200
1959	107,150	12,766	6,677	24,755	93.00	3,595,950
1960	88,650	8,802	9,822	25,893	106.10	3,587,650
1961	127,200	13,494	17,647	26,208	95.10	3,674,700
1962	81,650	18,947	11,836	28,525	104.00	3,545,000
1963	97,050	9,875	8,787	30,441	104.00	3,554,200
1964	107,250	8,724	7,951	32,388	110.00	3,528,410
1965	80,300	10,134	11,485	35,791	126.00	3,261,850
1966	86,200	5,288	10,878	39,489	124.00	3,302,000
1967	60,150	8,443	18,456	42,789	144.00	2,527,300
1968	77,900	2,220	10,646	46,425	136.80	3,418,100
1969	83,000	6,197	13,266	50,567	135.60	3,665,400
1970	89,750	7,830	10,108	53,592	134.50	3,011,400

[1] Prices published by the Ontario Ministry of Agriculture and Food.

Source: Statistics Canada.

TABLE 2 – ACTUAL AND ESTIMATED PRICES AND THEIR DIFFERENCES FOR ONTARIO PROCESSING PEACHES – 1956-70.

Year	Actual Price $/Ton	Estimated Price $/Ton	Difference Actual – Est. $/Ton	Difference as % of Actual
1956	104.10	105.27	−1.17	1.12
1957	102.30	100.80	1.50	1.47
1958	76.70	79.92	−3.22	4.20
1959	93.00	93.13	−0.13	0.13
1960	106.10	107.86	−1.76	1.66
1961	95.10	94.36	.74	0.78
1962	104.00	102.16	1.84	1.77
1963	104.00	106.73	−2.73	2.62
1964	110.00	105.58	4.42	4.02
1965	126.00	120.48	5.52	4.38
1966	124.00	126.54	−2.54	2.05
1967	144.00	144.89	−0.89	0.62
1968	136.80	138.05	−1.45	1.06
1969	135.60	135.53	0.07	0.05
1970	134.50	134.87	−0.37	0.28

Appendix - C

FACTORS AFFECTING THE PRICE PAID TO PRODUCERS FOR BARTLETT PEARS SOLD FOR PROCESSING IN ONTARIO

Several variables have been suggested as being responsible for the annual variation in the processing price of Bartlett pears in Ontario. The purpose of this analysis is to determine which of these variables are significant. The variables thought to be relevant are:

1. Total annual production in Ontario.
2. Total annual production in Canada.
3. Total stocks of canned pears in Canada.
4. Per capita disposable income.
5. Peach production in Ontario.
6. Total stocks of canned peaches in Canada.

The factors listed represent the quantifiable variables believed to be responsible for much of the annual variation in the processing price of pears in Ontario. Ordinary least squares regression was used to estimate their affect on price. The following equation mathematically relates the more significant variables.[1]

$P_p = 131.404 - 0.000756\ X_1 - 0.000239\ X_2 + 0.001249\ X_3$ (.000150) (.000075) (.000139)

$R_2 = .933$ Standard Error of the Estimate = 4.9369 d = 2.7126 (Durbin - Watson Statistic) Standard Errors set out in parenthesis.

where:

P_p = Price received by Ontario growers for Bartlett Pears sold to processors. (Dollars per ton).

X_1 = Ontario pear production (000's of lbs.).

X_2 = Ontario peach production (000's of lbs.).

X_3 = Total Canadian disposable Income (millions of dollars).

The analysis indicates that income, Ontario peach production and Ontario pear production account for more than 93 percent of the variation in the processing price of Ontario pears. The actual prices and the estimates derived by using this equation are presented in Table 2. The data obtained in the analysis is presented in Table 1.

Total Canadian pear production proved to be an insignificant variable. This suggests that high shipping costs make it impossible for other Canadian pears to compete with processing pears in Ontario. It was also determined that Canadian pear stocks did not significantly affect the processing price of Ontario pears. Ontario peach production was determined to be a more significant variable than Canadian peach stocks.

Two examples using current values will best illustrate the use of this equation.

To estimate the 1971 processing price for Bartlett pears the following data for 1971 is used:

Ontario Pear Production 50,800,000 lbs.
Ontario Peach Production 101,300,000 lbs.
Canadian Disposable Income 56,267,000,000[2]

$P_p = 131.404 - 0.00076\ (50,800) - 0.00024\ (101,300) + 0.0012\ (56,267) = 131.404 - 38.608 - 24.312 + 67.52 = 136.004$ (1971 estimated processing Bartlett pear price).

According to the Ontario Ministry of Agriculture and Food, the actual processing price for Bartlett pears in 1971 was $140.80.

Similarly, an estimate for the 1972 processing price for Bartlett pears can be calculated using the following data:

Ontario Pear Production 54,450,000 lbs.[3]
Ontario Peach Production 78,600,000 lbs.[3]
Canadian Disposable Income 58,721,000,000[2]

$P_p = 131.404 - 0.00076\ (54,450) - 0.00024\ (78,600 + 0.0012\ (58,721) = 131.404 - 41.382 - 18.864 + 70.465 = \$141.62$ (1972 estimated processing Bartlett pear price).

This equation predicted that the 1972 processing price of Bartlett pears would be $141.62 per ton.

Growers, processors and others included in the industry may use this equation as a tool to help them estimate future prices. Because the relationship between variables and the affect of each variable in the price may differ from year to year those utilizing the equation should realize that it cannot be expected to estimate the price exactly.

[1] The equation was run using data in the logarithmic and non-logarithmic form. Only the most significant results are reported.

[2] Author's estimate.

[3] Preliminary estimates CDA.

TABLE I: ONTARIO PEAR PRODUCTION, ONTARIO PEACH PRODUCTION, CANADIAN PER CAPITA INCOME AND ONTARIO BARTLETT PEAR PROCESS PRICES – 1956-70

Year	Ontario Pear[1] Production 000's of lbs	Ontario Peach[1] Production 000's of lbs	Canadian Disposable[2] Income Millions of $'s	Ontario Bartlett[1] Pear Process Price $/ton
1956	40,950	68,350	20599	108.72
1957	19,000	113,300	22041	115.72
1958	43,250	129,400	23553	97.84
1959	38,350	107,150	24755	103.53
1960	44,850	88,650	25893	114.32
1961	40,800	127,200	26208	107.23
1962	53,400	81,650	28525	105.89
1963	36,550	97,050	30441	113.85
1964	55,100	107,250	32388	105.45
1965	44,350	80,300	35791	128.43
1966	55,650	86,200	39489	111.42
1967	44,750	60,150	42789	138.57
1968	35,250	77,900	46425	148.97
1969	39,800	83,000	50567	136.85
1970	41,064	89,750	53592	149.39

SOURCE: [1] Agricultural Statistics for Ontario, Ontario Ministry of Agriculture and Food.
[2] Statistics Canada.

TABLE 2: ACTUAL AND ESTIMATED PRICES AND THEIR DIFFERENCES FOR ONTARIO BARTLETT PROCESSING PEARS, 1956-70

Year	Actual Price $/ton	Estimated Price $/ton	Difference Actual – Est. $/ton	Difference as % of Actual
1956	108.72	109.80	1.08	0.99
1957	115.72	117.45	1.73	1.49
1958	97.84	97.14	.70	0.71
1959	103.53	107.67	4.14	3.99
1960	114.32	108.61	5.71	4.99
1961	107.23	102.84	4.39	4.09
1962	105.89	107.11	1.21	1.14
1963	113.85	118.56	4.71	4.14
1964	105.45	104.52	.93	0.88
1965	128.43	123.35	5.08	3.95
1966	111.42	118.01	6.59	5.91
1967	138.57	136.61	1.96	1.41
1968	148.97	144.09	4.88	3.27
1969	136.85	144.60	7.75	5.66
1970	149.39	145.81	3.58	2.40